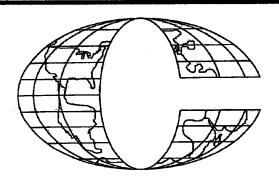
#### Prepared for

## **Interim Pedricktown Site Group**

c/o Leed Environmental, Inc. Van Reed Office Plaza 2209 Quarry Drive, Suite C-35 Reading, Pennsylvania 19609

# Residential Water Sampling Plan Groundwater Monitoring Plan Quality Assurance Project Plan NL Industries, Inc. Superfund Site Pedricktown, New Jersey

June 2006 Groundwater Monitoring Plan Revised December 2006



Prepared by

CSI Environmental, LLC

918 Chesapeake Avenue Annapolis, Maryland 21403

#### INTERIM PEDRICKTOWN SITE GROUP TECHNICAL COMMITTEE

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June 21, 2006

#### First Class Mail

Ms. Renee Gelblat
Project Manager
New Jersey Superfund Branch II
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region 2
290 Broadway
19th Floor
New York, NY 10007-1866

RE: NL Industries, Inc. Superfund Site; Pedricktown, NJ

Dear Ms. Gelblat:

Enclosed for your final review are three copies of the Residential Water Sampling Plan, Groundwater Monitoring Plan, and Quality Assurance Project Plan ("QAPP") for the NL Industries Superfund Site, which were prepared on behalf of the Interim Pedricktown Site Group by CSI Environmental, LLC. The QAPP includes a copy of the Laboratory Quality Assurance Manual prepared by Chemtech Laboratories. Electronic versions of the Residential Water Sampling Plan and the Groundwater Monitoring Plan/QAPP were approved by your emails on May 18, 2006 and June 16, 2006, respectively.

Please let me know if additional information or clarification is needed.

Very truly yours,

LEED ENVIRONMENTAL. INC.

Project Coordinator

enclosures .

cc: Mr. Paul Harvey - New Jersey Department of Environmental Protection

(w/enclosure, by first class mail)

Mr. Jeff Moore/Mr. Dustin Ferris - CSI Environmental, LLC

(w/enclosure, by first class mail)

Technical Committee, Interim Pedricktown Site Group (w/enclosure, by first class mail)

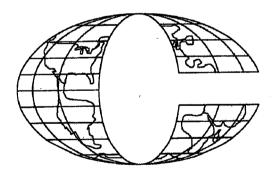
## Prepared for

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c/o Leed Environmental, Inc. Van Reed Office Plaza 2209 Quarry Drive, Suite C-35 Reading, Pennsylvania 19609

## Residential Water Sampling Plan NL Industries, Inc. Superfund Site Pedricktown, New Jersey

May 2006



Prepared by

**CSI Environmental, LLC** 

918 Chesapeake Avenue Annapolis, Maryland 21403

## TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SAMPLING AND ANALYSES	1
3.0	DATA EVALUATION AND REPORTING	2
4.0	SCHEDULE	2
LIST	OF FIGURES	
Fimre	1 I ocation Plan	

#### 1.0 INTRODUCTION

On behalf of the Interim Pedricktown Site Group (Group), CSI Environmental, LLC (CSI) has prepared this Residential Water Sampling Plan to describe the procedures that will be used to obtain and analyze samples of water from selected residences located in the vicinity of the NL Industries, Inc. Superfund Site in Pedricktown, New Jersey. The monitoring event is intended to respond to the U.S. Environmental Protection Agency's (USEPA) April 7, 2006 request.

#### 2.0 SAMPLING AND ANALYSES

Upon receipt of EPA's authorization to proceed and approvals from the property owners, CSI will obtain water samples from the residences using sampling and analytical techniques that are generally consistent with those described in the Sampling, Analysis, and Monitoring Plan (SAMP) and the Quality Assurance Project Plan (QAPP) [GeoSyntec, 1997], which were included in the Remedial Design Work Plan previously approved by the United States Environmental Protection Agency (EPA). These are also the same techniques used by CSI during the January 2004 sampling event. As requested, CSI updated the QAPP to reflect the procedures to be used for the upcoming sampling event.

As noted above, CSI will initiate sampling upon receipt of EPA's approval of the plan and upon receipt of permission from property owners to enter their properties. CSI will obtain samples of water from the Hodge commercial property and the Butcher, Cruz, Sopko, Gates and Eyler residences (Figure 1). Working within the property owners' schedules, CSI will obtain water samples from taps located in piping prior to any water treatment systems. CSI will collect first-flush water samples at each property. In addition, CSI will attempt a 15-minute purge at maximum flow and will collect water samples after the purging period. CSI will document actual purging sampling results in a sampling log.

All samples will be analyzed for total and dissolved lead and cadmium. Separate samples will be collected for total and dissolved constituents. Samples to be analyzed for dissolved lead and cadmium will be filtered in the field using an in-line 0.45 micron filter. CSI will use field portable equipment to monitor parameters in the field including specific conductance, pH, turbidity and temperature. CSI will document field parameters. Chemtech Laboratories of Mountainside, New Jersey will perform chemical analyses of the water samples. The laboratory was approved and used for the 2004 groundwater monitoring event. The laboratory will analyze the water samples using EPA method ILM04.1.

Quality assurance/quality control (QA/QC) procedures will be generally consistent with those described in the updated QAPP (attached) and will be consistent with the QA/QC procedures previously used for groundwater sampling. Laboratory instrument detection limits and other pertinent procedures will be as specified by the method and as indicated in the attached QAPP.

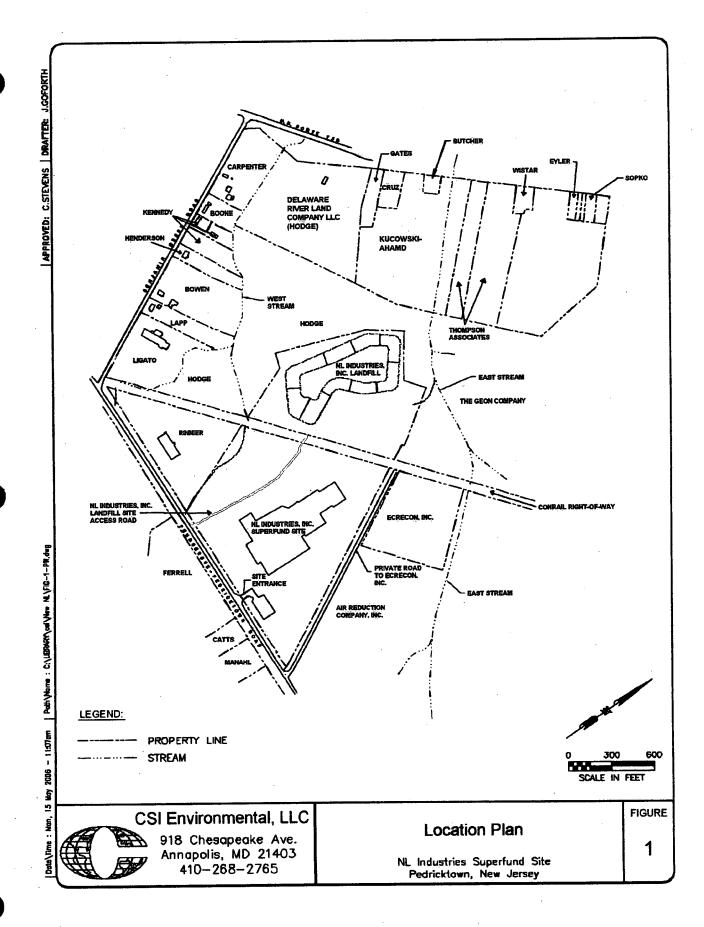
#### 3.0 DATA EVALUATION AND REPORTING

Upon receipt of laboratory data, CSI will validate the data and prepare a report to present the data and summarize findings. The report will include descriptions of procedures, QA/QC information, and comparisons of new data to previously obtained data.

#### 4.0 SCHEDULE

CSI proposes to perform the water sampling at the residences on a schedule that is satisfactory to the individual property owners. CSI will attempt to perform the work within 14 days from receipt of EPA's authorization to proceed. However, the actual schedule will depend upon resident availability. CSI anticipates that its report will be provided to EPA within 6 to 8 weeks after the sampling is completed.

# **FIGURE**



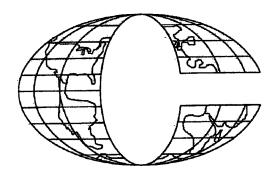
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# **Interim Pedricktown Site Group**

c/o Leed Environmental, Inc. Van Reed Office Plaza 2209 Quarry Drive, Suite C-35 Reading, Pennsylvania 19609

# Groundwater Monitoring Plan NL Industries, Inc. Superfund Site Pedricktown, New Jersey

June 2006 Revised December 2006



Prepared by

CSI Environmental, LLC

918 Chesapeake Avenue Annapolis, Maryland 21403

## TABLE OF CONTENTS

1.0	INTRODUCTION	. 1
2.0	BACKGROUND	1
3.0	MONITORING WELL ABANDONMENT	2
4.0	GROUNDWATER MONITORING	2
4.1	Surveying of MW13 - MW17	2
4.2	Sampling and Analysis	
4.3	Purging of MW13 - MW17	
4.4	Possible Contingency Activities	4
4.5	QA/QC	5
4.6	Data Evaluation and Reporting	5
5.0	SCHEDULE	5
6.0	REFERENCES	5
LIST (	OF TABLES	
Table 1	Planned Groundwater Monitoring Locations and Well Construction Details	
LIST (	OF FIGURES	
_	Location Plan Proposed Monitoring Well and Sampling Locations	

#### 1.0 INTRODUCTION

On behalf of the Interim Pedricktown Site Group (Group), CSI Environmental, LLC (CSI) has prepared this Groundwater Monitoring Plan to describe the procedures that will be used to obtain and analyze samples of groundwater from selected groundwater monitoring wells located at the NL Industries Superfund Site in Pedricktown, New Jersey (Figure 1). The purpose of the proposed monitoring event is to provide an update of groundwater conditions at the site and to evaluate any potential changes in groundwater quality that may have occurred since groundwater quality was last monitored in January 2004.

CSI will perform the monitoring event using sampling and analytical techniques that are generally consistent with those described in the Sampling, Analysis, and Monitoring Plan (SAMP) and Quality Assurance Project Plan (QAPP), which were included in the Remedial Design Work Plan [GeoSyntec, 1999] previously approved by the United States Environmental Protection Agency (EPA) and used during the January 2004 groundwater monitoring. As requested, CSI has updated the QAPP [CSI, 2006] to reflect the procedures to be used for the upcoming sampling event. CSI's goal is to obtain samples of groundwater that are representative of aquifer conditions using low-impact techniques that are generally consistent with the procedures described in Low-Flow (Minimal Draw down) Ground-Water Sampling Procedures [Puls and Barcelona, 1998]. CSI will document the results of the monitoring event in a written report.

#### 2.0 BACKGROUND

Groundwater data have been periodically obtained from the site since 1983. Evaluations of groundwater at the site were performed by the Group from 1997 through 1999 and were presented in the *Phase I Groundwater Evaluation Technical Memorandum* [GeoSyntec, 1998] and the *Phase II Groundwater Evaluation Technical Memorandum* [GeoSyntec, 1999]. In both documents, GeoSyntec concluded that (i) groundwater quality at the site had previously been impacted by operations at the site and (ii) groundwater quality had improved significantly following the termination of operations at the site. Also, in the *Phase II Groundwater Evaluation Technical Memorandum* [GeoSyntec, 1999], GeoSyntec recommended that, in combination with monitoring, consideration be given to evaluating possible remediation alternatives, including monitored natural attenuation and injection of alkalinity to enhance the removal of constituents from groundwater and further minimize any potential mobility of constituents.

Pursuant to a Consent Decree issued by EPA, the Group conducted remedial activities for soil and sediment, which were completed in May 2003. The remedial action included the excavation, stabilization, and off-site disposal of soil, sediment, and debris that contained lead at concentrations above the remedial action objective. As described in the *Phase II Groundwater Evaluation Technical Memorandum*, it is possible that the removal of soil, sediment, and debris from the site may result in improved groundwater quality at the site.

A groundwater monitoring event was conducted at the site in January 2004, which followed the completion of the RA. The results were provided to EPA in the 2004 Groundwater Monitoring Report [CSI, 2004]. EPA provided comments to the report in a letter dated 21 March 2006. Pursuant to receipt of the comments, the Group requested that an additional round of groundwater sampling be performed to aid in making decisions regarding a remedy for groundwater. The EPA subsequently approved the Group's plan, which is described herein. The Group and CSI revised the plan in response to EPA's December 2006 oral request.

#### 3.0 MONITORING WELL ABANDONMENT

CSI recommended in its 2004 Groundwater Monitoring Report that monitoring well OD be abandoned. The casing is broken and the well is not suitable for sampling. Several other monitoring wells are capable of providing groundwater quality information in the vicinity of OD. Therefore, CSI plans to abandon monitoring well OD in accordance with applicable regulations.

#### 4.0 GROUNDWATER MONITORING

#### 4.1 Surveying of MW13 - MW17

The locations and elevations of monitoring wells MW13 through MW17 will be surveyed by a New Jersey licensed surveyor as follows. The inner well casing will be surveyed to the nearest hundredth (0.01) foot in relation to the permanent, on-site datum and horizontally to an accuracy of one-tenth of a second latitude and longitude. A permanent water level measurement mark will be etched onto the top of the inner well casing to allow for accurate, consistent, and comparable water level measurements.

#### 4.2 Sampling and Analysis

During groundwater monitoring, CSI will (i) measure the depth to groundwater in each well to be sampled; (ii) monitor field parameters; (iii) obtain groundwater samples; (iv) NL Industries

submit the samples for laboratory analysis for volatile organic compounds (VOCs), total lead and cadmium, and dissolved lead and cadmium; (v) validate the laboratory data; and (vi) prepare a report to summarize the data. For comparison of data, CSI will use Pro-Active Industries<sup>TM</sup> submersible pumps to perform low-flow groundwater sampling to obtain groundwater samples from the monitoring wells last sampled in 2004, where possible, and to obtain groundwater samples from MW13 through MW17 which have not been sampled since 1997 or prior. CSI will evaluate groundwater quality at the selected wells using field parameters to determine whether or not the groundwater sample is representative of aquifer conditions (e.g. low turbidity and stable field parameters). Monitoring wells selected for sampling are identified in Table 1. A plan showing the selected wells is provided as Figure 2.

Purge water extracted for groundwater monitoring will be allowed to infiltrate back onto the ground surface in selected locations at the site in accordance with Section 2.4.5.7 of the NJDEP *Field Sampling Procedures Manual* [August, 2005]. The locations selected will be in the vicinity of the former manufacturing facility where constituent concentrations in groundwater have historically been detected above regulatory levels.

The Group will use Chemtech Laboratories of Mountainside, New Jersey to perform chemical analyses of groundwater samples. This laboratory was approved by EPA for the January 2004 monitoring event. The selected laboratory will analyze the samples for total lead, dissolved lead, total cadmium, and dissolved cadmium using EPA method ILM04.1 and VOCs using EPA method OLC03.2, or equivalent methods, if approved by EPA. The instrument detection limits for lead and cadmium will be as specified by the method. Samples will be preserved in accordance with the appropriate EPA method. Samples to be analyzed for total lead and total cadmium will not be filtered. Samples to be analyzed for dissolved lead and cadmium will be filtered in the field using an in-line 0.45 micron filter. CSI will use field portable equipment to monitor groundwater parameters in the field including: specific conductance, pH, and temperature. CSI will document field parameters and use the results to evaluate whether or not a sample is representative of groundwater quality in the aquifer. Quality assurance/quality control (QA/QC) procedures will be generally consistent with those described in the revised QAPP.

#### **4.3 Purging of MW13 - MW17**

Initially, CSI will attempt to obtain groundwater samples from monitoring wells MW13 through MW17 in accordance with the procedures outlined in Section 4.2. Since monitoring wells MW13 – MW17 have not been sampled since 1997 or prior, current well conditions are unknown. CSI will purge the wells to yield a non-turbid discharge prior to

sampling, where possible. If CSI is initially unable to obtain a clear groundwater sample from any of these wells, then the sample will not be retained. Instead, CSI will use the following procedures in an attempt to obtain a clear sample:

- First, CSI will attempt to purge a larger volume of water from any of the wells that do not yield clear samples using bailers or submersible pumps;
- Next, CSI will use an alternative technique such as retaining a licensed well driller to re-develop the well by air-lift or other reasonable development method.

Provided the purging or alternative techniques are effective, CSI will then attempt to resample the affected well. If after a reasonable attempt the groundwater purged from the wells is not clear, then CSI will either recommend filtering the sample prior to laboratory analysis or omitting the sample from laboratory analysis since a turbid sample is not representative of aquifer conditions.

#### 4.4 Possible Contingency Activities

In the event of equipment malfunctions or lack of yield from a monitoring well, CSI may modify the sampling procedure to obtain representative groundwater samples. For example, if well yield is low and low-flow sampling cannot be performed without excessive draw down (i.e. without drying the well or increasing turbidity), then CSI may use an alternative method of sampling such as (i) removing one or more well volumes of groundwater from the well, (ii) drying the well several times prior to obtaining samples, or (iii) performing sampling over two days (i.e. CSI may purge a well on one day and obtain a sample from the well on the following day after the water level recovers). As a last resort, if a bailer is necessary to obtain a groundwater sample, then CSI will carefully lower a disposable bailer into the well, avoiding agitation to the degree possible, to retrieve sufficient water to fill sample bottles.

Field parameters will be used to evaluate whether or not a sample of groundwater is representative of ambient groundwater. If field parameters do not stabilize, then CSI will not consider the sample to be representative of ambient groundwater conditions (i.e. apparent constituent concentrations will be biased high). Field parameters that do not stabilize or that vary significantly from previous measurements or measurements made at nearby locations may indicate that a sample is not representative of ambient conditions and this may be used to determine whether or not the integrity of a monitoring well was compromised during the remedial action. If field parameters do not stabilize or appear inconsistent with previous data or data obtained nearby, then CSI may request that the sample be omitted from laboratory

analysis or that the data be qualified, if analyzed. CSI will evaluate the groundwater quality data and make recommendations regarding well use or abandonment after the initial monitoring event.

#### 4.5 **QA/QC**

QA/QC procedures to be performed will be consistent with the QA/QC procedures previously used for groundwater monitoring. Applicable QA/QC procedures outlined in the revised *QAPP* [CSI, 2006] will be used to validate groundwater data. The laboratory will use the QA/QC procedures required by the selected analytical method. Laboratory QA/QC procedures are included as an appendix in the revised QAPP.

#### 4.6 Data Evaluation and Reporting

Upon receipt of laboratory data from the selected laboratory, CSI will validate the data and prepare a report to present the data and summarize the findings. The report will include a description of procedures, QA/QC information, and a comparison of new data to previously collected data to evaluate whether or not groundwater quality at the site continues to improve. The report will also include recommendations for additional work at the site, which will include additional monitoring, and could include the abandonment of additional wells and/or the installation of additional or replacement monitoring wells. CSI and the Group also anticipate that the new data will supplement the information provided in the 2004 Groundwater Monitoring Report [CSI, 2004].

#### 5.0 SCHEDULE

Upon receipt of EPA's approval to proceed, the Group will authorize CSI to perform the groundwater monitoring activities described in this plan. The Group will also notify the property owners about the schedule for sampling monitoring wells MW13 through MW17. At the present time, CSI anticipates that a report to present the data and summarize the findings would be submitted to EPA within 8 to 10 weeks after receipt of the groundwater data from the laboratory.

#### 6.0 REFERENCES

CSI Environmental LLC, "Groundwater Monitoring Report", Annapolis, Maryland, April 2004.

CSI Environmental LLC, "Quality Assurance Project Plan, Groundwater and Residential Well Sampling, NL Industries Superfund Site, Pedricktown, New Jersey", Annapolis, Maryland, May 2006.

GeoSyntec Consultants, "Remedial Design Work Plan", Columbia, Maryland, September 1996.

GeoSyntec Consultants, "Sampling Analysis and Monitoring Plan", Columbia, Maryland, March 1998.

GeoSyntec Consultants, "Phase I Groundwater Evaluation Technical Memorandum", Columbia, Maryland, June 1998.

GeoSyntec Consultants, "Phase II Groundwater Evaluation Technical Memorandum", Columbia, Maryland, January 2000.

New Jersey Department of Environmental Protection, "Field Sampling Procedures Manual," August 2005.

Puls and Barcelona, "Low-Flow (Minimal Draw down) Ground-Water Sampling Procedures," 1998.

United States Environmental Protection Agency, "Record of Decision, Decision Summary, NL Inclustries, Inc., Pedricktown, Salem County, New Jersey", July 1994.

United States Environmental Protection Agency, "Guidance for Quality Assurance Project Plans – EPA QA/G-5", EPA/240/R-02/009, December 2006

# **TABLE**

Table 1
Planned Groundwater Monitoring Locations and Well Construction Details
NL Industries Superfund Site
Pedricktown, New Jersey

Monitoring Well	Casing Diameter	Well Depth	Screened Interval <sup>(2)</sup>	Top of Casing Elevation (3)	Depth To Water <sup>(4)</sup>	Groundwater Elevation	Aquifer Zone <sup>(5)</sup>
BR	4	39	33-39	9.74	4.6	5.14	UA
JS	2	15.37	5-15	12.95	6.23	6.72	UA
JDR	2	27.26	17-27	13.01	6.3	6.71	UA
KSR	2	15	5-15	9.53	3.02	6.51	UA
KDR	2	24	14-24	9.47	3.04	6.43	UA
NS	2	16.5	6.5-16.5	12.17	7.22	4.95	UA
ND	2	24	14-24	11.22	6.5	4.72	UA
OS	2	21.3	6.3-21.3	11.82	6.63	5.19	UA
OD <sup>(6)</sup> - Broken	2	37.3	12.3-37.3	12.3	7.31	4.99	UA
SS	2	16.4	6.4-16.4	11.64	5.57	6.07	UA
SD	2	29.4	17.4-29.4	12.33	6.25	6.08	UA
11	4	54.1	34.1-54.1	9.72	5.5	4.22	UA
13	4	115.7	95.7-115.7	11.59	19.8 <sup>(7)</sup>	- 8.21 <sup>(7)</sup>	SCA
14	4	46.6	26.6-46.6	11.39	6.46 <sup>(7)</sup>	4.93 <sup>(7)</sup>	UA
15	<b>.</b> 4	25	10.0-25.0	11.32	6.07 <sup>(7)</sup>	5.25 <sup>(7)</sup>	UA
16	4	56.8	36.8-56.8	10.79	8.71 <sup>(7)</sup>	2.08 <sup>(7)</sup>	UA
17	4	23	8.0-23.0	9.31	5.1 <sup>(7)</sup>	4.21 <sup>(7)</sup>	UA
22	2	16	11-16	14.16	8.26	5.9	UA
23	2	24	24-34	14	8.04	5.96	UA
26	2	22	12-22	11.86	5.5	6.36	UA
27	2	15	5-15	13.49	7	6.49	UA
28	2	30	20-30	13.98	7.52	6.46	UA
30R	2	28.71	17-27	12.81	6.87	5.94	UA
31	2	15	5-15	14.27	8.46	5.81	UA
32	2	30	20-30	14.22	8.82	5.4	ÜA
33	2	10	5-10	6.67	3.4	3.27	UA
34	2	20	10-20	6.55	3.13	3.42	UA
12	4	78.2	58.2-78.2	11.79	13.94	-2.15	FCA
24	2	73	68-73	13.13	15.65	-2.52	FCA

<sup>(1)</sup> Depth to bottom of well in feet below top of casing (TOC).

<sup>(2)</sup> Screened interval of well in feet below ground surface.

<sup>(3)</sup> TOC elevation in feet above mean sea level.

<sup>(4)</sup> Depth to water in feet below TOC, measured in January 2004.

<sup>(5)</sup> UA = Unconfined Aquifer, FCA = First Confined Aquifer, SCA = Second Confined Aquifer.

<sup>&</sup>lt;sup>(6)</sup>OD will not be sampled due a broken well casing. CSI recommends it be abandoned.

<sup>(7)</sup> Depth to water in feet below TOC, measured in December 2006.

# **FIGURES**

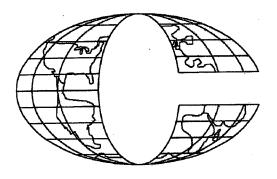
## Prepared for

# **Interim Pedricktown Site Group**

c/o Leed Environmental, Inc. Van Reed Office Plaza 2209 Quarry Drive, Suite C-35 Reading, Pennsylvania 19609

# Quality Assurance Project Plan NL Industries, Inc. Superfund Site Pedricktown, New Jersey

**June 2006** 



Prepared by

CSI Environmental, LLC

918 Chesapeake Avenue Annapolis, Maryland 21403

## TABLE OF CONTENTS

E	XECU	JTIVE SUMMARY	. 1
1.	PRC	DJECT DESCRIPTION	. 1
	11	<u>Introduction</u> .	1
	1.2	Site Location and History	1
		Project Quality Objectives	
	1.2	1.3.1 Overview	
		1.3.2 Oversight and QA Testing	
		1.3.3 Environmental Sampling	
	1 4	Data Quality Objectives	
		Data Quality Objective Narratives	
	1.5	1.5.1 Overview.	
		1.5.2 Groundwater	
		1.5.3 Residential Water	. <b>.</b>
2.	PRC	DECT ORGANIZATION AND RESPONSIBILITIES	4
	2.1	<u>Overview</u>	. 4
	2.2	<u>EPA</u>	. 4
	2.3	Interim Pedricktown Site Group	. 4
	2.4	CSI Project Manager	. 4
		OA Officer	
	2.6	Analytical and Material Testing Laboratory	. 5
3.	QUA	ALIFICATIONS	. 6
•			
		General	
		CSI Project Manager	
		OA Officer	
	3.4	Analytical Laboratory	6

# TABLE OF CONTENTS (cont.)

4.1 Overview 4.2 Daily Record Keeping 4.2.1 Daily Logs 4.2.2 QA Monitoring Logs and Data Sheets 4.2.3 Problem and Solution Memoranda 4.2.4 Photographic Documentation 4.2.5 Monitoring Activity Changes 4.3 Final Report 4.4 Storage of Records  5. QA OBJECTIVES FOR DATA 5.1 QA Objectives for Measurement Data 6. SAMPLING PROCEDURES 6.1 Overview 6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water 6.4 Sample Collection, Handling, and Shipping	7 7 8
4.2 Daily Record Keeping 4.2.1 Daily Logs 4.2.2 QA Monitoring Logs and Data Sheets 4.2.3 Problem and Solution Memoranda 4.2.4 Photographic Documentation 4.2.5 Monitoring Activity Changes 4.3 Final Report 4.4 Storage of Records  5. QA OBJECTIVES FOR DATA 5.1 QA Objectives for Measurement Data 6. SAMPLING PROCEDURES 6.1 Overview 6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	778
4.2.1 Daily Logs 4.2.2 QA Monitoring Logs and Data Sheets 4.2.3 Problem and Solution Memoranda 4.2.4 Photographic Documentation 4.2.5 Monitoring Activity Changes 4.3 Final Report 4.4 Storage of Records  5. QA OBJECTIVES FOR DATA  5.1 QA Objectives for Measurement Data  6. SAMPLING PROCEDURES  6.1 Overview 6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	7 8 8
4.2.2 QA Monitoring Logs and Data Sheets 4.2.3 Problem and Solution Memoranda 4.2.4 Photographic Documentation 4.2.5 Monitoring Activity Changes 4.3 Final Report 4.4 Storage of Records  5. QA OBJECTIVES FOR DATA  5.1 QA Objectives for Measurement Data  6. SAMPLING PROCEDURES  6.1 Overview 6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	7 8 8
4.2.3 Problem and Solution Memoranda 4.2.4 Photographic Documentation 4.2.5 Monitoring Activity Changes 4.3 Final Report 4.4 Storage of Records  5. QA OBJECTIVES FOR DATA  5.1 QA Objectives for Measurement Data  6. SAMPLING PROCEDURES  6.1 Overview 6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	8 8
4.2.4 Photographic Documentation. 4.2.5 Monitoring Activity Changes. 4.3 Final Report. 4.4 Storage of Records.  5. QA OBJECTIVES FOR DATA.  5.1 QA Objectives for Measurement Data.  6. SAMPLING PROCEDURES.  6.1 Overview. 6.2 Off-Site Access Procurement. 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water.	8
4.2.5 Monitoring Activity Changes 4.3 Final Report 4.4 Storage of Records  5. QA OBJECTIVES FOR DATA  5.1 QA Objectives for Measurement Data  6. SAMPLING PROCEDURES  6.1 Overview 6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	
<ul> <li>4.3 Final Report.</li> <li>4.4 Storage of Records</li> <li>5 QA OBJECTIVES FOR DATA.</li> <li>5.1 QA Objectives for Measurement Data</li> <li>6 SAMPLING PROCEDURES</li> <li>6.1 Overview.</li> <li>6.2 Off-Site Access Procurement.</li> <li>6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water</li> </ul>	
<ul> <li>4.4 Storage of Records</li> <li>5. QA OBJECTIVES FOR DATA</li> <li>5.1 QA Objectives for Measurement Data</li> <li>6. SAMPLING PROCEDURES</li> <li>6.1 Overview</li> <li>6.2 Off-Site Access Procurement</li> <li>6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water</li> </ul>	
5. QA OBJECTIVES FOR DATA  5.1 QA Objectives for Measurement Data  6. SAMPLING PROCEDURES  6.1 Overview  6.2 Off-Site Access Procurement  6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	
5.1 QA Objectives for Measurement Data  6. SAMPLING PROCEDURES  6.1 Overview  6.2 Off-Site Access Procurement  6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	<b>9</b>
SAMPLING PROCEDURES      Overview     Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	10
6.1 Overview     6.2 Off-Site Access Procurement     Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	10
6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	13
6.2 Off-Site Access Procurement 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water	13
7 · - 1 · · · · · · · · · · · · · · · · ·	
6.4 Sample Collection, Handling, and Shipping	14
	14
6.5 Sample Identification and Documentation	15
6.6 Field Records	
7. SAMPLE CUSTODY PROCEDURES	17
7.1 Overview	17
7.2 Sample Custody	17
7.3 Chain-of-Custody Record	17
7.4 Field Custody Procedures	18
7.5 Transfer of Custody and Shipment	19
8. CALIBRATION PROCEDURES AND FREQUENCY	20
8.1 Field Instruments	
8.2 <u>Laboratory Instruments</u> NL Industries	20
•	6.6.2006

## TABLE OF CONTENTS (cont.)

9. ANALYTICAL PROCEDURES	22
9.1 Introduction	22
9.2 Laboratory Analyses	22
10. INTERNAL QUALITY CONTROL CHECKS	23
10.1 Field Measurements	
10.2 Field Sampling	
10.3 <u>Laboratory Analysis</u>	24
11. DATA VALIDATION	25
11.1 Overview	25
11.2 Laboratory Data Quality Review and Validation	25
11.3 Review and Validation of Data Received From the Laboratories	25
12. PERFORMANCE AND SYSTEM AUDITS	28
12.1 General	28
12.2 Field Performance/System Audit(s)	28
12.3 <u>Laboratory System Audit</u>	28
12.4 Performance Evaluation Audit	29
13. PREVENTATIVE MAINTENANCE PROCEDURES	30
13.1 Field Equipment/Instruments	30
13.2 <u>Laboratory Instruments</u> .	30
14. SPECIFIC ROUTINE PROCEDURES TO ASSESS DATA PRECISION	N.
ACCURACY, AND COMPLETENESS	
14.1 Field Measurements	31
14.2 Laboratory Data	
14.2.1 Precision	
14.2.2 Accuracy	34
NL Industries	
Quality Assurance Project Plan iii	Rev 6.6,2006

# TABLE OF CONTENTS (cont.)

1	4.2.3 Completeness	34
	4.2.4 Sensitivity	
15. COR	RECTIVE ACTION	36
15.1	<u>Overview</u>	36
	Field Corrective Actions	
	Laboratory Corrective Action	
	ORATORY QUALITY ASSURANCE REPORTS	•
17. REF	ERENCES	39
LIST OF	TABLES	
Table 1	Summary of Sample Containers, Sample Preservation, and San	nple Holding Times
Table 2	Summary of Method and Quantitation Limits	
Table 3	Laboratory Reporting Limits	
LIST OF	FIGURES	
Figure 1	Location Plan	
Figure 2	Project Organizational Structure	
LIST OF	FAPPENDICES	
Appendix	A Quality Assurance Manual	

#### **EXECUTIVE SUMMARY**

This Quality Assurance Project Plan (QAPP) was prepared in accordance with the United States Environmental Protection Agency's (EPA's) document, "Guidance for Quality Assurance Project Plans - EPA QA/G-5" [EPA, 2002] and industry-accepted standards. It will be used as a reference for quality assurance/quality control (QA/QC) relating to upcoming groundwater and residential water sampling activities to be performed at the NL Industries, Inc. (NL Industries) Superfund Site (site) in Pedricktown, Salem County, New Jersey. The QAPP is adapted from the QAPP originally included as part of the Remedial Design (RD) [GeoSyntec, 1999] for the site.

Included herein are the specific QA/QC objectives and procedures for field and laboratory measurements relating to groundwater and residential water sampling. The objectives and procedures have been developed based on project goals, site conditions, and knowledge of available measurement techniques. The QAPP is intended to be used in concert with the appropriate Groundwater Monitoring Plan (GMP) and/or Residential Water Sampling Plan (RWSP), as necessary. The GMP and RWSP will provide details regarding sampling locations, methods and frequency as they are determined to be needed.

#### 1. PROJECT DESCRIPTION

#### 1.1 Introduction

On behalf of the Interim Pedricktown Site Group (Group), CSI Environmental, LLC prepared this Quality Assurance Project Plan (QAPP) for the groundwater sampling, residential water sampling and laboratory analysis required for the NL Industries, Inc. (NL Industries) Superfund Site (site) located in Pedricktown, Salem County, New Jersey. This QAPP was prepared pursuant to a request from the United States Environmental Protection Agency (EPA) in a letter dated 7 April 2006 and is in general conformance with EPA guidance, including the "Guidance for Quality Assurance Project Plans - EPA QA/G-5" [EPA, 2002] and industry-accepted standards regarding the assurance of quality in environmental monitoring projects. The QAPP addresses the QA/QC of groundwater and residential water sampling activities. Specific details regarding sampling locations, methods and frequency are provided in a separate Groundwater Monitoring Plan (GMP) and Residential Water Sampling Plan (RWSP), as needed, to address the planned activity.

#### 1.2 Site Location and History

This site is an abandoned, secondary lead smelting facility, located on 44 acres (18 ha) of land off of Pennsgrove-Pedricktown Road in Pedricktown, Oldmans Township, Salem County, New Jersey. The site and surrounding properties are shown in Figure 1. As shown in Figure 1, the site is bisected by an active railroad. Approximately 16 acres (6.5 ha) are located north of the railroad tracks, including 5.6-acres (2-ha) that comprise a closed landfill. The southern 28 acres (11.5 ha) include the former industrial area and landfill access road. The West and East Streams, parts of which are intermittent tributaries of the Delaware River, border and receive surface runoff from the site [EPA, 1994b].

The media affected at the site included soil, sediment and groundwater. The remedial action (RA) for soil and sediment was completed in May 2003. The soil and sediment RA included the excavation, treatment and off-site disposal of approximately 150,000 tons of lead-containing soil and sediment. Following the RA, the Group evaluated groundwater and residential water quality and submitted a Groundwater Monitoring Report to EPA in April 2004.

#### 1.3 Project Quality Objectives

#### 1.3.1 Overview

The Group intends to obtain samples of groundwater to evaluate the current condition of groundwater. It intends to obtain samples of residential water to provide EPA with the additional data that it requested. Therefore, the data quality objectives are to obtain data that are representative of actual groundwater and residential water conditions to the degree practical. However, as documented in previous reports, attempts to evaluate actual residential water quality conditions have been equivocal due to variables in the water piping configurations at each location and sampling limitations.

#### 1.3.2 Oversight and QA Testing

An experienced project manager will oversee and/or perform field activities. The project manager will ensure that activities are performed in accordance with the QAPP, GMP and RWSP, as appropriate.

#### 1.3.3 Environmental Sampling

Sampling and analysis of groundwater and residential water will be conducted as part of the project to enhance the current level of understanding of site chemical and physical characteristics. Samples of groundwater and residential water will be obtained by experienced scientists and engineers. The samples will be analyzed by a certified laboratory.

#### 1.4 <u>Data Quality Objectives</u>

The Data Quality Objectives (DQOs) for groundwater and residential water samples are to be able to detect small quantities of the selected constituents in the samples and evaluate temporal and spatial changes.

#### 1.5 Data Quality Objective Narratives

#### 1.5.1 Overview

DQO's are established to ensure that the data are sufficient and of adequate quality for their intended uses. A summary of the DQOs established for each respective media is provided in the following sections.

#### 1.5.2 Groundwater

Groundwater samples will be obtained to evaluate current groundwater conditions and to compare current conditions to those documented through previous evaluations. Sampling locations are provided in the GMP. Groundwater samples will be analyzed for total and dissolved lead, total and dissolved cadmium, and volatile organic compounds (VOCs). Groundwater quality parameters to be measured in the field include pH, temperature, specific conductivity, oxidation/reduction potential, turbidity and dissolved oxygen using portable field instruments. The field instruments will be operated in accordance with manufacturer's specifications.

Groundwater samples will be analyzed by a certified analytical laboratory for total and dissolved lead by EPA method ILM04.1, total and dissolved cadmium by EPA method ILM04.1, and VOCs by EPA method OLC03.2 (Tables 1 through 3). The number of groundwater samples and other specifics are provided in the GMP. Detection limits for lead, cadmium, and VOCs are determined by the analytical method, which are provided in the laboratory Quality Assurance Manual (QAM) in Appendix A.

#### 1.5.3 Residential Water

Residential water samples will be obtained to evaluate the water quality at the residences prior to water treatment. The locations of residential water samples are provided in the RWSP. Residential water samples will be obtained from the residential water supply system at a location prior to water softeners, filtration devices or holding tanks, if possible. Residential water quality parameters to be measured in the field include pH, turbidity, temperature, and specific conductivity using portable field instruments, as described above.

Residential water samples will be analyzed by a certified, approved analytical laboratory for total and dissolved lead by EPA method ILM04.1 and total and dissolved cadmium by EPA method ILM04.1. The number of residential water samples is provided in the RWSP.

#### 2. PROJECT ORGANIZATION AND RESPONSIBILITIES

#### 2.1 <u>Overview</u>

This section describes the organization and the responsibilities of the key project personnel for groundwater and residential water sampling. The organizational structure is presented in Figure 2. Depending upon personnel qualifications, one individual may serve in multiple roles.

#### 2.2 <u>EPA</u>

The EPA regulates, and has the authority to approve/accept, all technical activities associated with monitoring activities.

#### 2.3 Interim Pedricktown Site Group

The Group is responsible for the ultimate performance of the groundwater and residential water sampling. It is responsible for ensuring that evaluation and QA/QC activities are performed in accordance with the GMP, the RWSP and the QAPP.

#### 2.4 CSI Project Manager

The Project Manager is responsible for coordination of field activities, project schedule, and reporting.

#### 2.5 QA Officer

The QA Officer will be a CSI employee that oversees the implementation of the QAPP. Specific responsibilities of the QA Officer include the following:

- reviewing plans for clarity and completeness so that the QAPP can be implemented;
- observing and supporting the personnel who are performing tests by: (i) submitting blind samples (duplicates and blanks) for analysis by the laboratories; (ii) confirming that regular calibration of testing equipment is properly conducted and recorded; (iii) confirming that the testing equipment, personnel, and procedures do not deviate from their standards or ensuring that any changes do not adversely impact the value of the test data; (iv) confirming that the monitoring reports and test data are accurately recorded and maintained; and (v) verifying that the raw data are properly recorded, validated, summarized, and interpreted;

providing the Group with reports regarding monitoring and results including: (i)
review and interpretation of all data sheets and reports and (ii) identification of
work that may require special testing, inspection, or approval.

#### 2.6 Analytical and Material Testing Laboratory

The analytical laboratory is responsible for performing all analyses in accordance with the methods and detection limits specified in the GMP, RWSP, and QAPP. The anticipated analytical laboratory for groundwater and residential water is Chemtech Laboratories (Chemtech) of Mountainside, New Jersey. Chemtech's QAM is included as Appendix A to this QAPP.

#### 3. QUALIFICATIONS

#### 3.1 General

Presented in this section are the minimum qualification requirements for the parties involved with implementing the plans prepared for this project. The minimum standards must be demonstrated for each of the major categories listed.

#### 3.2 <u>CSI Project Manager</u>

The Project Manager will have a Professional Engineering license in the State of New Jersey or be a certified professional geologist. In addition, the Project Manager will have technical experience in the performance of environmental investigations.

#### 3.3 **QA Officer**

The QA Officer will be experienced in the evaluation of environmental media and will have a minimum of five years of remedial investigation or related experience.

#### 3.4 Analytical Laboratory

The analytical laboratory will be capable of performing analyses by the methods specified. The laboratory will have an established quality control/quality assurance program, will be capable of providing CLP-type data reports, and shall perform analyses and quality assurance activities in accordance with the QAPP. A laboratory QAM for Chemtech is included as Appendix A. The use of Chemtech as the analytical laboratory for groundwater and residential water sample analysis is contingent upon approval by the Group and EPA.

#### 4. QUALITY ASSURANCE DOCUMENTATION

#### 4.1 Overview

An effective QAPP depends largely on recognition of all environmental activities that should be monitored, and on assigning responsibilities for the monitoring of each activity. This is most effectively accomplished and verified by the documentation of quality assurance activities.

The QA Officer will provide the Group with signed descriptive remarks, data sheets, and logs to verify that the monitoring activities have been performed. The QA Officer will also maintain a complete file of pertinent documents.

#### 4.2 Daily Record Keeping

#### 4.2.1 Daily Logs

Standard reporting procedures will include preparation of daily logs. The QA Officer will prepare a daily log summarizing monitoring and testing activities, discussions with any subcontractors or any site visitors, problems encountered, and corrective actions taken. Each daily log will be signed by the QA Officer. In addition to the above, the daily logs will include the following information:

- date, project name, location, and other identification;
- weather conditions;
- materials received; and
- descriptions and locations of monitoring activities.

### 4.2.2 QA Monitoring Logs and Data Sheets

In addition to daily logs, the QA Officer will prepare more detailed QA monitoring logs and data sheets, as needed. As appropriate for the type of work in progress, logs and data sheets may include the following information as observed by the QA Officer:

- an identifying sheet number for cross referencing and document control;
- date, project name, location, and other identification;
- a reduced-scale Site Plan showing the proposed work areas and test locations;
- descriptions and locations of ongoing activities;
- equipment and personnel in each work area, including subcontractors;

- descriptions and specific locations of areas, or units, of work being tested and/or observed and documented; and
- the QA Officer's signature or initials.

#### 4.2.3 Problem and Solution Memoranda

Memoranda describing special situations will be prepared by the QA Officer, and must include the following information, where available:

- a detailed description of the situation or deficiency;
- the location and probable cause of the situation or deficiency;
- how and when the situation or deficiency was found or located;
- documentation of the response to the situation or deficiency;
- final results of any responses;
- measures taken to prevent a similar situation from occurring in the future; and
- the signature of the QA Officer and signature of the Group indicating concurrence.

The Group will be made aware of significant recurring problems associated with monitoring activities. The Group will then investigate the cause of the problem and evaluate possible solutions. When this type of evaluation is made, revisions to procedures will be documented and the appropriate documents will be revised.

#### 4.2.4 Photographic Documentation

If requested, and permitted by the Group, CSI will provide photographic documentation of the activities.

## 4.2.5 Monitoring Activity Changes

Changes in the planned activities may be required. In such cases, the QA Officer will notify the Group. The Group will notify the appropriate EPA representative and a new plan will be made for monitoring activities.

#### 4.3 Final Report

Upon completion of one round of groundwater and/or one round of residential water sampling, where one round refers to sampling and analysis of samples from all planned locations, CSI will prepare and submit a report to the Group. The report will describe the extent to which (i) the work was performed in compliance with the QAPP; (ii) groundwater and residential water sample collection and analysis was conducted in the appropriate locations; and (iii) the document provides the necessary supporting information.

At a minimum, this report will include:

- summaries of monitoring activities and results;
- monitoring logs;
- photographic documentation, if requested;
- laboratory test results;
- chain of custody forms;

The Group will submit the report to the EPA.

#### 4.4 Storage of Records

The QA Officer will be responsible for all QA document storage during the project. This includes copies of the laboratory analytical data, the QAPP, and the originals of all data sheets and reports. When the groundwater and residential water sampling is complete and upon acceptance of the reports, the original QA documents will be organized and retained by the QA Officer for at least 10 years or until requested by the Group.

#### 5. QA OBJECTIVES FOR DATA

#### 5.1 **QA Objectives for Measurement Data**

The overall QA objectives are to develop and implement procedures for field sampling, laboratory analysis, and reporting that will provide results which are legally defensible. The purpose of this section is to address the specific quantitative QA objectives of accuracy, precision, and completeness, along with the qualitative QA objectives of representativeness and comparability.

Definitions for the quantitative QA objectives are as follows:

- Precision: A measure of how closely individual measurements agree with each other. Precision is expressed as relative percent difference (RPD) of duplicate measurements and will be calculated for each analyte in accordance with the appropriate EPA Statements of Work (SOW) and relevant guidance. As an example, the precision goals (control limits) for analytes included in the Contract Laboratory Program (CLP) Target Analyte List (TAL) (laboratory metals analyses) are defined in EPA CLP SOW ILM04.1 [EPA, 1992] as + or - 20% RPD, with the exception of analytes with concentrations less than five times the CRDL (in which case the control limit would be the absolute value of the CRDL). EPA CLP requires that RPDs for field sample and duplicate recoveries be within + or - 20% RPD for water matrices and + or - 35% for soil matrices (if required). The analytical laboratory activities will, at a minimum, meet all of the precision criteria stated above and in the EPA SOW with the possible exception of samples exhibiting concentrations less than five to ten times the method detection limit (MDL) or in samples exhibiting specific matrix problems that are identifiable by redigestion and/or dilution followed by reanalysis. If these limits are exceeded, the data will be flagged in accordance with the SOW.
- Accuracy: A measure of how closely a measurement agrees with the correct value. Accuracy is expressed as percent recoveries (%R) of matrix spiked samples or as percent difference (%D) between a known standard value and a measured value. Accuracy will be determined for each analyte in accordance with the appropriate EPA SOW and relevant guidance. As an example, the accuracy goal (control limits) for analytes included in the CLP Target Analyte List (TAL) (laboratory metals analysis) are defined in the EPA CLP SOW ILM04.1 [EPA, 1992] as 75% 100% recovery, with the exception of analytes with concentrations exceeding the spike concentration by a factor of four or more. The analytical laboratory will perform all analyses within the EPA prescribed limits of accuracy

for routine analytical services that are covered under the SOW. The QA objective for the accuracy in terms of %D will be + or - 25 %D for water matrices unless otherwise stated in EPA approved methodologies for services not covered under EPA CLP SOW for Inorganics Analysis, Multi-Media, Multi-Concentration, Document Number ILM04.1.

• Completeness: A measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under normal conditions. Laboratory completeness will be based on the total number of samples that are analyzed under controlled conditions that meet the previously defined precision and accuracy objectives. Data produced by the laboratory will achieve completeness criteria that are greater than or equal to 95% for both soil and water matrices. Field completeness is defined as the ratio of the number of valid samples collected to the total number of samples required to be representative. Therefore, to ensure the completeness of field collected samples, the prescribed sampling program will be adhered to and all sampling will be performed using established standard operating procedures identified in the specific GMP or RWSP.

# Definitions for the qualitative QA objectives are as follows:

- Representativeness: A measure that expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Attainment of representative samples will be facilitated by utilizing appropriate sample collection and handling procedures presented in this QAPP. Additionally, representativeness of specific samples will be achieved by the following protocols:
  - appropriate sample number and location selection to adequately characterize the actual and current site conditions;
  - appropriate sampling procedures and equipment will be utilized;
  - appropriate selection of analytical methodologies that ultimately provide required detection limits for assessment of final DQOs;
  - appropriate selection of analytical parameters;
  - collection of the appropriate number of QA/QC samples to statistically verify proper functioning analytical equipment;

- documentation of sampling activities and sampling locations in field logs, on chain-of-custody forms, and in laboratory books that are signed and dated by sampling and analysis personnel.
- Comparability: A measure that expresses the confidence with which one data set can be compared with another. This depends on the similarity of sampling and analytical methods. To ensure data set comparability, the following steps may be taken:
  - locations of previous sampling stations will be identified and made consistent with the proposed sampling event(s) where appropriate;
  - samples will be analyzed for former suites of chemical parameters using similar or improved methods having detection limits at or below previous analyses;
  - techniques utilized to collect previous samples will be utilized when possible;
  - reporting units from previous chemical data bases will be reviewed and used to formulate current sample concentration units; and,
  - the level of QA/QC will be compared to previous sampling events and will be designed to be, at a minimum, consistent with previous sampling and analysis activities.

#### 6. SAMPLING PROCEDURES

#### 6.1 Overview

This section discusses the standard practices and procedures to be utilized during the field operations to ensure the collection of representative samples. The collection of representative samples depends upon:

- ensuring that the sample taken is representative of the material or medium being sampled;
- using proper sampling, sample handling, preservation, and quality control techniques;
- properly identifying the collected samples and documenting their collection in permanent field records (field log books, Chain-of-Custody records); and
- maintaining sample chain-of-custody.

The sampling plan should be referenced for a description of the appropriate sample containers, preservation methods, and holding times.

#### 6.2 Off-Site Access Procurement

The selected Contractor will coordinate with the Group and the EPA to identify access needs to off-site properties. Off-site access will be required for the Contractor, the representatives of the Group, EPA, and the NJDEP to conduct monitoring activities on other properties in the vicinity of the NL Industries property. Approvals for off-site access will be obtained by the Group prior to entry onto these properties. The following steps will be taken to obtain the necessary off-site access.

- Each property owner will be contacted by the Group through certified mail and, if
  necessary, by telephone and will be notified of the intent of the Group to conduct
  monitoring and/or remediation activities on their property. A request for permission
  to perform the described activities on the property will be made.
- If necessary, more formal legal arrangements (e.g., easement) will be made.

# 6.3 Sample Containers, Preservatives, Analyte-Free/Distilled/Potable Water

All sample containers will be provided by the analytical laboratory, analyte-free, QC checked, and shipped to the sampler prior to commencement of sampling activities. A summary of bottle specifications and preservative requirements are provided in Table 1. Sample containers will be cleaned by the manufacturer or supplier prior to shipment to the contracted analytical laboratory in accordance with OSWER Directive #9240.05A. Upon arrival, the QA Officer will review certification of the sample containers provided from the laboratory during each container shipment.

Sample preservatives and analyte-free water will also be provided by the laboratory. Commercially available distilled water may also be used in lieu of analyte-free water supplied by the laboratory. The QA Officer will verify the purity of the sample preservatives by reviewing specifications provided by the manufacturer or certifications by the analytical laboratory. The QA Officer will review certifications and/or analytical results provided by the laboratory to assure that the analyte-free/distilled water used on-site has been demonstrated not to possess any contaminants of concern at levels greater than the detection limits of the proposed analytical methods.

The QA Officer will also assure that any potable water used on-site was obtained from a treated municipal source or purchased from a commercial vendor as distilled or drinking water.

# 6.4 <u>Sample Collection, Handling, and Shipping</u>

Sample containers will be selected to ensure compatibility with the matrices and chemicals of concern at the site. At the time of sample collection, sample labels will be filled out and affixed to the sample container(s) to identify the site, sampling location, collector's initials, date and time of collection, preservatives added, and required analytical analyses. Samples to be analyzed for VOCs will be obtained during groundwater sampling only as described in the GMP. For metals analyses, two sets of samples will be obtained from each monitoring well during groundwater sampling. Likewise, two sets of samples will be obtained from each residential location during residential water sampling, as described in the RWSP. One set of samples (i.e. groundwater or residential water) will be unfiltered and used for laboratory analysis of total lead and cadmium. The other set (i.e. groundwater or residential water) will be filtered in the field using an in-line 0.45 micron filter, and analyzed for dissolved lead and cadmium.

After sample containers have been filled with a sample at a particular sampling location, they will be cushioned, placed in a shipping cooler, and covered with ice to maintain a cooler temperature of 4°C (40°F). Chain-of-custody documentation, which is detailed in Section 7.3 of this QAPP, will be completed for all samples in every sample shipping cooler. Chain of Custody forms will be placed in a watertight plastic bag (e.g., Ziplock) and taped to the inside lid of the cooler. The cooler(s) will then be sealed with tape and a signed and dated custody seal will be affixed over the lid. Coolers will then be shipped to the analytical laboratory by an overnight delivery service or will be picked up at the site by laboratory personnel within 24 hours of sample collection. Triplicate volumes of aqueous samples will be obtained for matrix spike and matrix spike duplicates that are to be analyzed for organic constituents.

#### 6.5 Sample Identification and Documentation

Samples are identified by using a standard sample label which is attached to the sample container. The sample labels are legally defensible documents after they are completed and attached to a sample. The following information will be included on the sample label:

- field identification or sample location number;
- date and time of sample collection;
- preservatives used;
- the initial(s) of the sampler(s); and
- the analyses to be performed.

The sample location number is assigned by the field investigator. This number is ordinarily an alpha-numeric code, designed for a particular inspection or investigation.

If a sample is split with a regulatory agency, or other project participants, sample labels with identical information should be attached to each of the sample containers by the party collecting the split sample. Also, all labels for blank or duplicate samples will be designated "blank" or "duplicate", respectively. This requirement does not apply to "blind" spike or duplicate samples which are to be submitted for laboratory QC purposes. In this case, the QC samples will be labeled no differently than the sample. This identifying information will also be recorded in the bound field log books and on the chain-of-custody.

#### 6.6 Field Records

Field personnel will use either bound field log books or site-specific field forms for the maintenance of field records. All aspects of sample collection and handling as well as visual observations will be documented in the field log books or on the field forms. All sample collection equipment (where appropriate), field analytical equipment, and equipment utilized

to make physical measurements will be identified in the field log books or on the field forms. All calculations, results, and calibration data for field sampling, field analytical, and field physical measurement equipment and all determinations based on professional judgment will also be recorded. All field analyses and measurements will be traceable to the specific piece of field equipment used and to the field investigator collecting the sample, making the measurement, or analyses.

All entries in field log books or on the field forms will be dated and legible, and will contain accurate and inclusive documentation of an individual's project activities. Since field records are the basis for later written reports, language will be objective, factual, and free of personal feelings or other terminology which might prove inappropriate. Once completed, these field log books and field forms become legally defensible documents and will be maintained as part of project files.

All log books will contain sufficient information on sampling and field activities to permit reconstruction of field activities without reliance on field personnel's memories. Additionally, shelf life, lot numbers, manufacturer information, and expiration dates of pH buffers and standard calibrating solutions used for field instrumentation will be recorded and maintained for future reference.

#### 7. SAMPLE CUSTODY PROCEDURES

#### 7.1 Overview

The possession of samples will be traceable from the time they are obtained until they are disposed by the analytical laboratory. The following custody procedures provide this means of sample tracking.

#### 7.2 Sample Custody

A sample is in custody if:

- it is in the field investigator's, transferee's, or lab technician's actual possession; or
- it is in the field investigator's, transferee's, or lab technician's view, after being in his/her physical possession; or
- it was in the field investigator's, transferee's, or lab technician's physical possession and then he/she secured it to prevent tampering; or
- it is placed in a designated secure area.

#### 7.3 Chain-of-Custody Record

The field Chain-of-Custody Record is used to record the custody of all samples collected. The Chain-of-Custody Record also serves as a sample logging mechanism for the analytical laboratory.

The following information will be supplied in the indicated spaces to complete the Chain-of-Custody Record:

- The project number.
- The project name.
- The sampler and/or sampling team leader must sign in the designated signature block.
- The sampling location number, date and time of sample collection, grab or composite sample designation, preservation method, and a brief description of the

type of sample and the sampling location must be included on each line (each line should contain only those samples collected at a specific location).

- The sampling team leader's name should be recorded in the right or left margin of the Chain-of-Custody Record when samples collected by more than one sampling team are included on the same form.
- The total number of sample containers should be listed in the indicated space for each sample. The total number of individual containers should also be listed for each type of analysis under the indicated media or miscellaneous columns. The type of container and required analyses should be indicated on the Chain-of-Custody Record.
- The field investigator and subsequent transferee(s) will document the transfer of the samples listed on the Chain-of-Custody Record in the spaces provided at the bottom of the Record. Both the person relinquishing the samples and the person receiving them must sign the form; the date and time that this occurred must be documented in the proper space on the Chain-of-Custody Record. Usually, the last person receiving the samples will be the laboratory representative.
- The remarks column at the bottom of the Chain-of-Custody Record is used to record air bill numbers or registered or certified mail serial numbers.

The Chain-of-Custody Record is a serialized document. Once the Record is completed, it becomes a legally defensible document and will be maintained in the project file. The suitability of any other form for chain-of-custody should be evaluated upon its inclusion of all of the above information in a legible format.

#### 7.4 Field Custody Procedures

Field custody procedures are as follows:

- To simplify the Chain-of-Custody Record, sample possession during the investigation will be limited to as few individuals as possible.
- The field investigator is responsible for the proper handling and custody of the samples collected until they are properly and formally transferred to another person or facility.

- Sample labels will be completed for each sample, using waterproof, non-erasable ink.
- The collection of samples will be documented in field log books or on field sampling forms.
- A Chain-of-Custody Record will be completed for all samples collected. A separate Chain-of-Custody Record will be utilized for each laboratory utilized.

#### 7.5 Transfer of Custody and Shipment

All samples will be accompanied by a Chain-of-Custody Record. When transferring the possession of samples, the individual receiving the samples will sign, date, and note the time that he/she received the samples on the Chain-of-Custody Record. The Chain-of-Custody Record documents transfer of custody of samples from the field investigator to another person or to the laboratory.

Samples will be properly packaged for shipment and delivered or shipped to the designated laboratory for analyses. Shipping containers will be secured by using tape and custody seals. The custody seals will be placed on the container so that it cannot be opened without breaking the seals. The seal will be signed and dated by the field investigator.

All samples will be accompanied by the Chain-of-Custody Record. The original record will be placed in a plastic bag inside the secured shipping container. One copy of the record will be retained by the field investigation leader. The original record will be transmitted to the QA Officer after the samples are accepted by the laboratory. This copy will become a part of the project file.

# 8. CALIBRATION PROCEDURES AND FREQUENCY

#### 8.1 Field Instruments

All field instrumentation used to collect data will be calibrated in accordance with manufacturer's instructions and/or standard operating procedures (SOPs). Initial calibration of the pH meter will be performed at the beginning of each working day and periodic calibrations will be made as necessary using standards that bracket the expected pH values of collected samples. These standards may include a pH 4, 7, and 10 buffer. Periodic calibration verifications will be performed on the field instrumentation to ensure the accuracy of the data.

All instrument calibrations will be documented in a calibration log book. The documentation will include:

- date of calibration (and time is calibrated more than once per day);
- instrument calibrated;
- type of calibration; and
- pre- and post-calibration results.

The field instruments will be considered to be operating properly if the results of the field calibration checks are within the QA/QC limits specified in the field instrument SOPs. If the results of the calibration checks are not within the QA/QC limits, then the following steps will be taken, as necessary:

- perform a re-analysis of the QA/QC sample to obtain acceptable results;
- prepare a new QA/QC sample to confirm the outlier,
- recalibrate the instrument;
- re-analyze the specific sample affected to confirm matrix interference;
- re-collect any sample in question to confirm unexpected or out-of-control results;
- replace the field instrument with an instrument that operates properly.

# 8.2 Laboratory Instruments

Calibration of laboratory equipment will be based on approved written procedures prepared by the laboratory. Records of calibration, repairs, or replacement will be filed and maintained by the designated laboratory personnel performing quality control activities. These records will be filed at the location where the work is performed and will be subject to QA audit, if deemed necessary.

In cases where analyses are conducted according to the EPA Contract Laboratory Program (CLP), the calibration procedures and frequencies specified in the applicable CLP Routine Analytical Services (RAS) Statement of Work (SOW) methods will be followed. All calibration procedures for special analytical services will be in accordance with the calibration requirements specified by EPA-approved protocols utilized during this project, as appropriate.

#### 9. ANALYTICAL PROCEDURES

#### 9.1 Introduction

Analytical procedures applied to environmental samples obtained from the site will include field methodologies and CLP laboratory analyses. The laboratory's QAM is attached as Appendix A to this document.

#### 9.2 <u>Laboratory Analyses</u>

Methods published by EPA will be used as the basis for all analyses for which such methods exist. For the analysis of parameters by CLP protocols, the laboratory will follow methods detailed in the CLP Statements of Work (SOWs) for organic and inorganic analyses. The analyses will be performed in accordance with the EPA's CLP as stated in EPA CLP SOW ILM04.1.

Tables 1-3 provide a summary of methods and laboratory quantitation and reporting limits for the analyses that will be used. Accompanying each method are detection limits for aqueous matrices that are routinely achievable when no interferences are present. It is expected that, due to the complexity of environmental samples, these detection limits will vary.

# 10. INTERNAL QUALITY CONTROL CHECKS

#### 10.1 Field Measurements

QC procedures for field measurements are limited to checking the reproducibility of the measurement by obtaining multiple readings on a single standard and by performing initial calibration and periodic calibration verifications on the instruments.

### 10.2 <u>Field Sampling</u>

QC checks for the sampling aspects of this project will include, but will not be limited to the following:

- use of field log books to assure completeness, traceability, and comparability of the samples collected;
- field checking of field log books and sample labels to assure accuracy and completeness;
- strict adherence to the sample chain-of-custody procedure, as outlined in this protocol; and
- submittal of QC samples from the field.

Field sampling procedures require the preparation and submittal of five types of QC samples from the field:

- Equipment Rinsate Blanks Equipment rinsate blanks are prepared in the field to verify that a sampling device (e.g., pump) is free from contamination. A sampling device is rinsed with distilled or deionized water, and the rinse water is transferred to the appropriate sample bottles, preserved, and submitted to the laboratory for analysis. Rinsate blanks will be taken at the rate of one per day for each sampling technique used, not to exceed one per day. Equipment rinsate blanks will be collected from submersible pumps and tubing, as well as from other field sampling devices.
- Blind Duplicates Two sets of samples from a source are prepared, labeled with unique sample numbers, and submitted to the laboratory without identifying the samples as duplicates. One blind duplicate will be prepared for every 20 environmental samples collected for each matrix type.

- Field Blanks Field blanks are analyzed to check for procedural contamination and/or ambient conditions at the site that may result in sample contamination. A sample of the water used for decontamination of equipment in the field will be placed in the appropriate bottle ware and sent for analysis. One field blank will be collected for each decontamination event performed.
- Split Samples Split samples consist of a larger sample volume separated into different containers and sent to different laboratories. Split samples will be taken at the request of the EPA using EPA supplied bottle ware.
- Matrix Spike/Matrix Spike Duplicates When necessary, three sets of samples from a source are prepared, labeled as sample matrix spike (MS) and matrix spike duplicate (MSD), and submitted to a laboratory. The laboratory adds a known concentration of a constituent of concern to the MS and MSD samples. All three samples are analyzed and the results are compared. A MS and a MSD sample will be obtained for every 20 aqueous samples collected.

The results of the analyses of these five QC samples are used as independent, external checks for laboratory and field contamination as well as for the precision of the analyses.

#### 10.3 Laboratory Analysis

The laboratory has demonstrated the ability to perform the methods presented herein. Verification of Chemtech's abilities is presented in their QAM which is attached as Appendix A. Internally produced data will be evaluated by the laboratory based on the following criteria (as appropriate for inorganic or organic chemical analyses):

- Method performance using the following QA checks:
  - laboratory control samples;
  - laboratory blanks;
  - spike recoveries (matrix and QC);
  - RPDs between samples and laboratory duplicates;
  - linearity of response (%D and % RSD) of calibration check compounds;
  - precision of calibration (ICVS and CCVS) checks; and
  - recoveries of laboratory control samples and independent QC check samples;
- adequacy of detection limits obtained;
- precision of replicate analyses; and
- comparison of the percentage of missing or undetected substances among replicate samples (not known by lab).

#### 11. DATA VALIDATION

#### 11.1 Overview

This section provides a summary of the methods to be used to verify that the collected data meet the identified DQOs. The laboratory data and field testing data will be verified according to these methods, will be checked for completeness, and will undergo final validation and data review by the QA Officer.

#### 11.2 Laboratory Data Quality Review and Validation

The analytical laboratories will perform in-house analytical data reduction and QA review in accordance with a multiple-level process as follows:

- analytical review performed by the bench analyst;
- technical review performed by a lab manager or team leader; and
- OA review on selected data performed by a quality assurance specialist.

The laboratories will notify the QA Officer of any data that may be qualified as preliminary, unacceptable, or having other limitations with respect to data quality.

# 11.3 Review and Validation of Data Received From the Laboratories

The QA Officer, or designee, will review field data and analytical reports received from the laboratories for appropriateness of the field and laboratory testing methodologies, precision, accuracy, comparability, and completeness. The data validation will be performed in accordance with the following SOPs:

- SOP No. HW-2, Revision 11, 1/92, Evaluation of Metals Data for the Contract Laboratory Program;
- SOP No. HW-13, Revision 1 for VOA data.

The data validation process consists of a final review of data and, based on data quality, final classification of data as follows:

- accepted;
- reported; and
- qualified.

Data validation will generally include the following steps:

- verifying completeness of data;
- verifying sample custody and that samples were appropriately collected and preserved in the field and laboratory;
- verifying that samples were analyzed within appropriate sample holding times;
- verifying appropriateness of field and laboratory test methods;
- comparing data to objectives for precision, accuracy, and comparability;
- evaluating field QA/QC sample data, such as blanks and duplicates;
- evaluating laboratory QA/QC sample data, such as duplicates, spikes, and blanks;
- checking for discrepancies (such as transcription and calculation errors) and data outliers;
- discussing identified discrepancies with the field personnel or laboratory, as appropriate, to clarify the reason for the discrepancy and to formulate a course of action; and
- accepting, rejecting, or qualifying data with respect to the acceptance criteria.

When data discrepancies and outliers are identified that could potentially result in rejection or qualification of data, corrective action steps will be taken. Specific corrective action steps that may be taken include:

- requesting additional information from the laboratory;
- flagging the associated data as estimated or rejected;
- performing re-analysis or additional analyses of existing samples to resolve the problem; and
- performing additional sampling and analyses to confirm the analytical results.

The following data analysis methods may be used during data validation to assist in the data quality review, and after data validation to assist in data interpretation:

- preparation of data summary tables;
- mapping of aerial extent of specific chemicals; and
- conducting statistical analysis of data, including calculation of means, modes, standard deviations, and/or coefficients of variation.

All data points rejected during the data validation stage will be deleted from the final tables, plots, and other data analysis products. Qualified data, may or may not be included depending upon the nature of the qualification, but will be noted as qualified if included. All tables, plots, and other data analysis products will be checked and reviewed. Data review summaries, including data quality summaries, will be included in the final report.

#### 12. PERFORMANCE AND SYSTEM AUDITS

#### 12.1 General

Performance and system audits for sampling and analyses operations consist of on-site review of field and laboratory quality assurance systems and on-site review of equipment for sampling, calibration, and measurement. The audits are designed to evaluate the capability and performance of personnel, items, activities, and documentation. These audits will be performed at the request of the EPA or when deemed necessary by the QA Officer. The results from any performance or system audits that are required will be submitted to the EPA for review and comment.

#### 12.2 Field Performance/System Audit(s)

Field performance/system audits are used to evaluate the effectiveness of project activities by mitigating the effects of potential sampling error. A thorough on-site system audit may be used to evaluate field sampling procedures (e.g. equipment, personnel, supplies, chain-of-custody, data tracking, and data review) and/or field analytical procedures (e.g. mobile laboratories, if used).

If deemed necessary the QA Officer, or his/her designee, will make one or more non-scheduled visits to the project site to observe the performance of the field operations team. The audits will be performed and assessed in accordance with guidelines set forth in the "Uniform Federal Policy for Quality Assurance Project Plans" [EPA, 2005].

#### 12.3 Laboratory System Audit

A laboratory systems audit may be conducted by the QA Officer, or his/her designee, prior to and/or during the course of the project. The audits will be performed at the request of the EPA or when deemed necessary by the QA Officer. These audits are designed to ensure that the systems and operational capabilities of the laboratories are maintained and methodologies and quality control measures for the project are being followed as specified by the QAPP and the laboratory QAM. The audits will be performed and assessed in accordance with guidelines set forth in the "Uniform Federal Policy for Quality Assurance Project Plans" [EPA, 2005].

#### 12.4 Performance Evaluation Audit

A performance evaluation (PE) audit is used to evaluate a laboratory's ability to obtain an accurate and precise analysis of a blind check sample for a specific analytical method. Following the analytical data validation described in the previous section, a PE audit of the laboratory may be conducted. This audit may be conducted if it is determined that a significant portion of the QA data provided in the analytical data package for any parameter is outside acceptance criteria control limits. These PE audits may include a review of all raw data developed by the laboratory but not reported to the consultant, along with the submission of blind spiked check samples for the analysis of the parameters in question.

PE audits may also be conducted by reviewing the laboratory's results of certification testing performed by State or Federal environmental agencies. An additional component of PE audits includes the review and evaluation of raw data generated from the analysis of PE samples and actual field samples that may be in question.

# 13. PREVENTATIVE MAINTENANCE PROCEDURES

### 13.1 Field Equipment/Instruments

The specific preventative maintenance procedures to be followed for field equipment will be those recommended by the manufacturer. Maintenance performed on field equipment will be documented in the field activity log. Backup instruments and equipment will be available either on-site or from rental organizations to limit delays.

#### 13.2 <u>Laboratory Instruments</u>

All laboratories participating in the CLP are required to have SOPs for preventative maintenance for each measurement system and required support activity. All maintenance activities will be documented in log books to provide a history of maintenance records.

# 14. SPECIFIC ROUTINE PROCEDURES TO ASSESS DATA PRECISION, ACCURACY, AND COMPLETENESS

#### 14.1 Field Measurements

Accuracy of the field measurements will be assessed using daily instrument calibration, calibration checks, and analysis of blanks. Accuracy will be statistically represented by calculating one or more of the following:

- percent recovery (%R) of a known standard added to the sample of interest; and
- percent difference (%D) between a known standard value and a measured value.

Percent recovery (%R) will be calculated as follows:

$$R = Qd/Qa \times 100$$

where,

Qd = quantity determined by analysis

Qa = true or accepted reference quantity or value

Percent difference (%D) will be calculated as follows:

$$\%D = \underline{Oi - Qc} \times 100$$

where,

Qi = quantity determined initially

Oc = quantity determined from subsequent analysis

The QC objective for the accuracy in terms of %D will be + or - 25 %D for water matrices unless otherwise stated in EPA-approved methodologies for services not covered under EPA CLP SOW ILM04.1, Statement of Work for Inorganics Analysis, Multi-Media, Multi-Concentration, Document Number ILM04.1 [EPA, 1992].

Because true values for pH, specific conductance, and temperature are not known for the particular matrices and specific sampling locations for the project, the accuracy of data produced by field instruments will be maintained and documented by performing initial calibrations followed, where appropriate, by continuing calibration verifications and/or continuing calibrations with known standards and in accordance with manufacturer instructions. Precision will be assessed on the basis of reproducibility by multiple measurements for a single sample. The percent relative standard deviation (% RSD) will then be determined as follows:

$$\% RSD = \frac{S}{X} X 100$$

where,

% RSD = percent relative standard deviation;

S = standard deviation of measurements;

X = mean of measurements.

Requirements for field precision will follow laboratory requirements and will have a limit of + or - 30 % RSD.

Data completeness will be calculated using Equation 14-1. Completeness is expressed as a percent of the overall data that was generated and is calculated as follows:

% Completeness = 
$$\frac{V}{T}$$
 X 100 (Equation 14-1)

where,

V = number of measurements judged valid; and

T = total number of measurements.

Laboratory completeness will be based on the total number of samples that are analyzed under controlled conditions that meet the previously defined precision and accuracy objectives. Data produced by the laboratory will achieve completeness criteria that are greater than or equal to 95% for water matrices.

Field completeness is defined as the ratio of the number of valid samples collected to the total number of samples required to be representative. Therefore, to ensure the completeness of field collected samples, the prescribed sampling program will be adhered to and all sampling will be performed using established procedures outlined in the appropriate sampling plan.

#### 14.2 <u>Laboratory Data</u>

Laboratory results will be assessed for compliance with the required precision, accuracy, completeness, and sensitivity as described below.

#### 14.2.1 Precision

Precision is an estimate of the reproducibility of a method and/or collection procedure, and is estimated by several statistical tests: the standard deviation of the error distribution, the coefficient of variation (CV) and the relative percent difference (RPD) between replicate (duplicate) samples. Information regarding the precision of chosen sample collection methods and analytical methods will be ascertained by collecting field replicates and performing laboratory duplicates. Additional information concerning laboratory precision will be obtained from matrix spike duplicates and continuing calibration verifications. If sufficient replicate and/or duplicate data are collected, the arithmetic mean and standard deviation can be determined.

Precision can also be defined by the CV, which expresses the standard deviation as a percentage of the mean. Specific statistical comparison of replicate (duplicate) data from field and laboratory measurements, as a means of evaluating precision of both sample collection procedures and laboratory performance, may be accomplished by first comparing the obtained replicate (duplicate) results with the published EPA CLP criteria as stated in EPA CLP SOW ILM04.1 and OLC03.2, Statement of Work for Inorganics Analysis, Multi-Media, Multi-Concentration, Document Number ILM04.1 and Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration, Document Number OLM03.2. If not available for a given method, the RPD may be calculated and compared to the laboratory precision criteria. This calculated precision value may then be compared with the stated precision DQO for the analyte in question to determine whether the DQO has been satisfied.

Precision of laboratory analysis will be assessed by comparing the analytical results between matrix spike/matrix spike duplicate (MS/MSD) for organic analysis, and laboratory duplicate analyses for inorganic analysis. The relative percent difference (% RPD) will be

$$%RPD = \frac{S-D}{(S+D)/2} \times 100$$
 (Equation 14-2)

calculated for each pair of duplicate analysis using Equation 14-2.

where: S = first sample value (original or MS values); and

D = second sample value (duplicate or MSD value).

Laboratory limits of precision are presented in the Laboratory QAM in Appendix A.

#### 14.2.2 Accuracy

The accuracy of a method is an estimate of the difference between the true value and the determined mean value. Certain QA parameters such as laboratory control samples, reagent water spike samples, QC check samples, MS samples, and surrogate spike samples contain known constituent concentrations. By comparing the percent recovery results to the known true value, it is possible to measure the accuracy of the analysis. In routine practice, the laboratory will collect the data for each of these parameters for a period of at least 30 measurements. The results of these 30 measurements will then be used to calculate a mean value. Then, based on the desired level of confidence, two or three standard deviation ranges will be established as practical control limits. To be valid, these control limits must meet the accuracy limits specified in the appropriate EPA method for each analyte measured. If the determined control limits are within the range established for the analyte and method by the EPA, then the determined range becomes the practical control limit used by the laboratory until another set of data is developed and new control limits are calculated.

Specific statistical comparison of percent recovery values reported by the laboratory as a measure of method accuracy will be compared with the published EPA criteria for the accuracy of an individual method to determine whether the result is within control limits. Data not meeting the control limits for accuracy will be considered invalid or unusable unless the laboratory can provide additional information to substantiate matrix problems.

Accuracy of laboratory results will be assessed using the analytical results of MS/MSD samples. The percent recovery (%R) of MS samples will be calculated using Equation 14-3.

$$%R = \frac{A - B}{C} \times 100$$
 (Equation 14-3)

where:

A = the analyte concentration determined by the analysis of the spiked sample;

B = the background level determined by an analysis of the unspiked sample; and

C = the amount of the spike added.

#### 14.2.3 Completeness

Data completeness is defined as the percentage of total tests conducted that are deemed valid. Data completeness will be evaluated during data validation and the resulting information will be used to determine the completeness of the analyses. Overall criteria for data completeness will be determined and compared to project DQOs presented in Sections 1.3 through 1.5 of this QAPP.

The data completeness results will be assessed for compliance with the amount of data required for decision making. The completeness is calculated using Equation 14-1. Data produced by the laboratory will achieve completeness criteria that are greater than or equal to 95% for water matrices. To ensure the completeness of field-collected samples, the prescribed sampling program will be followed and all sampling will be performed using established SOPs.

#### 14.2.4 Sensitivity

The achievement of method detection limits depends on instrument sensitivity and matrix effects. Therefore, it is important to monitor the instrument sensitivity to ensure data quality through constant instrument performance. The instrument sensitivity will be monitored through calibration checks, the analysis of method blanks, and laboratory control samples, etc.

#### 15. CORRECTIVE ACTION

#### 15.1 Overview

The purpose of this section is to:

- outline the procedures for implementing and documenting corrective actions; and
- define the responsibilities of appropriate personnel.

#### 15.2 Field Corrective Actions

Project personnel will be responsible for reporting suspected QA nonconformance or suspected deficiencies of any activity or issued document by reporting the situation to the QA Officer. The QA Officer will be responsible for assessing the suspected problems in consultation with the Contractor and Project Coordinator and making a decision based on the potential for the situation to impact the quality of the project. If it is determined that the situation warrants a reportable nonconformance requiring corrective action, then a nonconformance report will be initiated by the QA Officer.

The QA Officer will be responsible for ensuring that corrective action for nonconformances are initiated by:

- evaluating all reported nonconformances;
- controlling additional work on nonconforming items;
- determining the corrective action, if any, to be taken;
- maintaining a log of nonconformances;
- reviewing nonconformance reports and any corrective actions taken; and
- ensuring that nonconformance reports are included in the final site documentation to be maintained in the project files.

If appropriate, the QA Officer will ensure that no additional work that is dependent on the nonconforming activity is performed until the corrective actions are completed.

Corrective actions for field measurements may include:

- repeating measurements to check the error;
- checking for all proper adjustments for ambient conditions such as temperature;
- checking the equipment power supply;
- recalibrating the field instruments;
- checking the calibration;
- replacing the instrument measuring devices; and
- stopping work (if necessary).

The QA Officer or his designee is responsible for all site activities. In this role, the QA Officer at times is required to adjust the site programs to accommodate site specific needs. When it becomes necessary to modify a program, the responsible person notifies the QA Officer of the anticipated change and implements the necessary changes after obtaining the approval of the Group, and in consultation with EPA.

Corrective actions will be implemented and documented in the field log book. No project-team member will initiate corrective actions without prior communication of the findings through the proper channels.

### 15.3 Laboratory Corrective Action

For the CLP Routine Analytical Services (RASs), corrective action is implemented in accordance with the CLP protocol or the SOPs for the applicable alternate methods.

# 16. LABORATORY QUALITY ASSURANCE REPORTS

Analytical laboratory quality control will be summarized for the QA Officer at appropriate times by the laboratory QA manager. The QA Officer will prepare status reports based on the quality reports from the analytical laboratory. These status reports will be given to the Project Coordinator. In addition, periodic QA/QC reports may be submitted along with any site progress reports prepared by the QA Officer.

#### 17. REFERENCES

Bureau of National Affairs, Federal Register, Vol. 56, No. 138, July 18, 1991.

GeoSyntec Consultants, "Remedial Design Work Plan", Columbia, Maryland, September 1996.

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United States Environmental Protection Agency, "Guidance for Quality Assurance Project Plans – EPA QA/G-5," EPA/240/R-02/009, December 2002.

United States Environmental Protection Agency, "NL Industries, Inc. Site, Statement of Work," June 1996.

United States Environmental Protection Agency, "Record of Decision, Decision Summary, NL Inclustries, Inc., Pedrichtown, Salem County, New Jersey", July 1994.

United States Environmental Protection Agency, "Uniform Federal Policy for Quality Assurance Project Plans," March 2005

# TABLES

# TABLE 1

# SUMMARY OF SAMPLE CONTAINERS, SAMPLE PRESERVATION, AND SAMPLE HOLDING TIMES

# NL Industries Superfund Site Pedricktown, New Jersey

Parameter	Container	Preservati	ve Holding Tin	ne Analytical Method
Aqueous Samples				
Metals	500 ml Plastic	HNO <sub>3</sub>	14 Days	USEPA Method CLP SOW ILM04.1
Volatile Organics	40 ml Glass Vial	HCL	7 Days	USEPA Method CLP SOW OLC03.2

#### TABLE 2

# SUMMARY OF METHOD AND QUANTITATION LIMITS FOR CHEMICAL ANALYSES

# NL Industries, Inc. Superfund Site Pedricktown, New Jersey

Parameter	Method(s)	Quantitati Water Matrices	on Limits <sup>(a)</sup> Solid Matrices <sup>(a)</sup>
Field Parameters			-
рН	EPA Method 150.1	0.1 Units	N/A
Specific Conductance	EPA Method 120.1	0.1 μS/cm	N/A
Temperature	EPA Method 170.1	1 degree C	· N/A
Laboratory Parameters			
Total Metals	CLP SOP ILM05.3	See Table 3	See Table 3
VOCs	CLP SOP OLC03.2	See Table 3	See Table 3

N/A = Not Applicable TBD = To Be Determined

TABLE 3

# LABORATORY REPORTING LIMITS

# NL Industries, Inc. Superfund Site Pedricktown, New Jersey

	Contract Required Quantitation Limit (ppb)	Method Detection Limit (ppb)*
Analyte	Aqueous Sample	Aqueous Sample
Inorganics		
Aluminum	200	11.8
Antimony	60	16.1
Arsenic	10	4.1
Barium	200	0.90
Beryllium	5	1.3
Cadmium	5	1.1
Calcium	5000	9.0
Chromium	10	1.8
Cobalt	50	2.1
Соррег	25	1.5
Iron	100	27.6
Lead	- 10	4.5
Magnesium	5000	21.7
Manganese	15	1.4
Mercury	0.2	
Nickel	40	4.2
Potassium	5000	42.8
Selenium	35	9.0
Silver	10	2.2
Sodium	5000	261

NL Industries Quality Assurance Project Plan

	Contract Required Quantitation Limit (ppb)	Method Detection Limit (ppb)*
Analyte	Aqueous Sample	Aqueous Sample
Thallium	25	9.6
Vanadium	50	1.5
Zinc	60	3.1
Cyanide	10	,

	Reporting Detection Limits (ppb)	Method Detection Limit (ppb)
Analyte	Aqueous Sample	Aqueous Sample
Volatile Organic Compounds		
1,1,1,2-Tetrachloroethane	0.5	0.169
1,1,1-Trichloroethane	0.5	0.141
1,1,2,2-Tetrachloroethane	0.5	0.177
1,1,2-Trichloroethane	0.5	0.182
1,1,2-Trichlorotrifluoroethane		
1,1-Dichloroethane	0.5	0.156
1,1-Dichloroethene	0.5	0.141
1,1-Dichloropropene	0.5	0.160
1,2,3-Trichlorobenzene	0.5	0.156
1,2,3-Trichloropropane	0.5	0.205
1,2,4-Trichlorobenzene	0.5	0.113
1,2,4-Trimethylbenzene	0.5	0.153
1,2-Dibromo-3-Chloropropane	0.5	0.190
1,2-Dibromomethane	0.5	0.173
1,2-Dichlorobenzene	0.5	0.162
1,2-Dichloroethane	0.5	0.214
1,2-Dichloropropane	0.5	0.145
1,3,5-Trimethylbenzene	0.5	0.149
1,3-Dichlorobenzene	0.5	0.152
1,3-Dichloropropane	0.5	0.145
1,4-Dichlorobenzene	0.5	0.168
2,2-Dichloropropane	0.5	0.187
2-Butanone	2.0	0.992
2-Chloroethyl vinyl ether		

NL Industries

	Reporting Detection Limits (ppb)	Method Detection Limit (ppb)
Analyte	Aqueous Sample	Aqueous Sample
2-Chlorotoluene	1.0	0.108
2-Hexanone	2.0	0.808
4-Bromofluorobenzene	0.5	0.042
4-Chlorotoluene	0.5	0.152
4-Isopropyltoluene		
4-Methyl-2-Pentanone	2.0	0.900
Acetone	5.0	1.130
Acrolein	·	
Acrylonitrile	2.0	0.462
Allyl Chloride	0.5	0.150
Benzene	0.5	0.137
Bromobenzene	0.5	0.144
Bromochloromethane	0.5	0.121
Bromodichloromethane	0.5	0.167
Bromoform	0.5	0.170
Bromomethane	0.5	0.226
Carbon Disulfide	0.5	0.143
Carbon Tetrachloride	0.5	0.148
Chlorobenzene	0.5	0.133
1-Chlorobutane	0.5	0.170
Chloroethane	0.5	0.168
Chloroform	0.5	0.161
Chloromethane	0.5	0.069
cis-1,2-Dichloroethene	0.5	0.124
cis-1,3-Dichloropropene	0.5	0.134
Cyclohexane		
Dibromochloromethane	0.5	0.173
Dibromofluoromethane	0.5	
Dibromomethane	0.5	0.192
Dichlorodifluoromethane	0.5	0.062
Diethyl Ether	0.5	0.157
Ethyl Acetate		
Ethyl Benzene	0.5	0.145
Ethyl Methacrylate	0.5	0.157

	Reporting Detection Limits (ppb)	Method Detection Limit (ppb)
Analyte	Aqueous Sample	Aqueous Sample
Hexachloroethane	0.5	0.167
Hexachlorobutadiene	0.5	0.133
Iodomethane	0.5	0.079
Isopropylbenzene	0.5	0.137
Isopropyl Alcohol	0.5	
Isopropyl Ether	0.5	0.184
Isopropyl Acetate		
m/p-Xylenes	1.0	0.287
Methacrylonitrile	1.0	0.618
Methyl Acrylate	0.5	0.161
Methyl Acetate		
Methyl Methacylate	1.0	0.322
Methyl tert-butyl Ether	1.0	0.147
Methcyclohexane		
Methylene Chloride	0.5	0.269
Naphthalene	0.5	0.144
n-amyl Acetate		
n-Buytlbenzene	0.5	0.116
N-propylbenzene	0.5	0.141
o-Xylene	0,5	0.152
Pentachloroethane	0.5	0.174
p-Isopropyltoluene	0.5	0.140
Propionitrile	5.0	0.710
Sec-butylbenzene	0.5	0.137
Styrene	0.5	0.145
t-1,3-Dichloropropene	0.5	. 0.144
t-1,4-Dichloro-2-butene	5.0	0.447
Tert butyl alcohol	5.0	2.856
Tert-Butylbenzene	0.5	0.149
Tertrachloroethene	1.0	0.155
Tetrahydrofuran	1.0	0.448
Toluene	0.5	0.134
Trans-1,2-Dichloroethene	0.5	0.138
Trichloroethene	0.5	0.146

	Reporting Detection Limits (ppb)	Method Detection Limit (ppb)
Analyte	Aqueous Sample	Aqueous Sample
Trichlorofluoromethane	0.5	0.089
Vinyl Acetate		
Vinyl Chloride	0.5	0.074
1,4-Dioxane		

#### Notes:

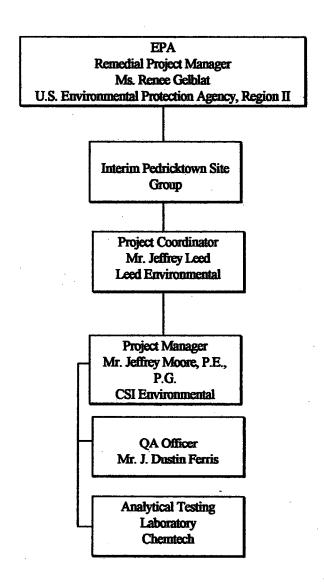
<sup>\*</sup> CLP does not specify MDLs; MDLs that are reported are lab specific.

## **FIGURES**

#### FIGURE 2

#### PROJECT ORGANIZATIONAL STRUCTURE

#### NL Industries, Inc. Superfund Site Pedricktown, New Jersey



### **APPENDICES**

## APPENDIX A Laboratory Quality Assurance Manual

## QUALITY ASSURANCE MANUAL

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Introduction

Revision Date: November 13, 2005

**Quality Assurance Manual** 

Revision #: 2001-14

Page i

#### INTRODUCTION

The Chemtech Quality Program, outlined in this document, has been prepared to meet the requirements of ISO Guide 25 and National Environmental Laboratory Accreditation Program (NELAP). The program establishes all Quality Assurance (QA) policies and Quality Control (QC) procedures to follow in order to ensure and document the quality of the analytical data produced by the Laboratory. The Quality Program is reviewed periodically and revisions are implemented as required.

Chemtech Standard Operating Procedures (SOP's), provide explicit instructions on the implementation of each element of the plan and assure that compliance with the requirements of the plan are achieved. All employees are required to adhere to the requirements of the SOP's in performing their specific job functions. SOP's are reviewed periodically and revisions are implemented as required when change occurs.

The goal of the Quality Program is to consistently produce accurate, defensible analytical data through the implementation of sound and useful Quality Assurance/Quality Control management practices. The plan will ensure that Chemtech, its employees and client expectations are achieved.

Table of Contents

Revision Date: November 13, 2005

#### **Quality Assurance Manual**

2001-14 Revision #:

Page ii

#### TABLE OF CONTENTS Page# · TOPIC S.# 1. Quality Policy ...... 1 1.1 Chemtech Mission ...... 1 1.2 Policy Statement ...... 1 2.1 Organizational Entity ...... 2 3. Relationship Between Management, Technical Operations, Support Services, and Quality System...... 5 4. Job Description of Key Personnel...... 7 5. Approved Signatories...... 9 6. Personnel Training.......10 6.1 Employee Orientation and Training......10 6.3 Technical Skills......10 6.4 Training Records......11 6.5 Training for key personnel......11 7. Ethics Policy ......13 7.1 Code of Ethics......13 7.2 Employee Ethics Training.......14 8. Facilities and Resources for New Work ......14 8.1 Review of New Work ......14 8.2 Resource Availability......14 8.3 New Work Coordination.....14 9.1 Client Confidentiality......17 10.1 Procedure ......17 10.2 Documentation......17 10.3 Corrective Action......17 10.4 QA/QC Auditing......18 11. Sample Management Process ......19 11.2 Sample Container Preparation & Shipment......19 11.3 Sample Acceptance 19 11.4 Sample Receipt ......20 11.5 Sample Custodian Responsibilities......20 11.6 Sample Management Staff Responsibilities ......21 11.7 Subcontracted Analysis......21

**Table of Contents** 

Revision Date: November 13, 2005

## Quality Assurance Manual Revision #: 2001-14

Page iii

#### TABLE OF CONTENTS

S.#	TOPIC	Page #
11.	8 Sample Storage	22
12.	Analytical Capabilities	24
13.	Major Equipment	30
	Document Control	
	14.1 Document Oversight	
	14.2 Distribution of Controlled Documents	41
	14.3 Document Revisions	42
	14.4 Standard Operating Procedures (SOP's)	42
14.	5 Loghook Control	42
	14.6 Analytical Document Maintenance and Storage	42
	14.7 Personnel Records	43
15.	Traceability of Measurements	44
	15.1 Metric Measurements - Thermometer and Balance Calibrations	44
	15.2 Chemical Standards	44
16.	Calibration and Verification of Test Procedures	45
	16.1 Organic Test Procedures	45
	16.2 Inorganic Test Procedures	
17.	Calibration, Verification, and Maintenance of Equipment	49
	17.1 Instrument Calibration	49
	17.2 Instrument Maintenance	
	17.3 Calibration/Maintenance Log	
18.	Verification Practices	
	18.1 Proficiency Testing (PT) Programs	50
	18.2 Use of Reference Material	50
	18.3 Internal Quality Control Procedures	
19.	Laboratory Management Arrangements for Exceptionally Permitted	
	Departures from Documented Policies and Procedures	54
	19.1 Procedure	54
20.	Corrective Actions for Testing Discrepancies	55
	20.1 Out-of-Control Events	
	20.2 Corrective Action Process	55
	20.3 Departures from Documented Policies and Procedures	55
	20.4 Corrective Action Monitoring	56
21.	Reporting Analytical Results	
	21.1 Required Documentation	
	21.2 Significant Figures in Analytical Reports	57
	21.3 Units used to Express Analytical Results	58
	21 4 Demont Continue	

Table of Contents

Revision Date: November 13, 2005

#### **Quality Assurance Manual**

Revision #:

2001-14

Page iv

# TABLE OF CONTENTS S.# TOPIC Page # 22. Data Review and Internal Quality Audits 60 22.1 Data Review 60 22.2 Internal Quality System Audits 61 23. Electronic Data 62 24. Glossary 63 25. References 68 26. Resume and Lab Certifications 69 26. Lab certificate and current Parameter list 71

**Quality Assurance Manual** 

Revision #: 2001-14

Page 1 of 71

#### 1 QUALITY POLICY

#### 1.1 CHEMTECH MISSION

Chemtech will be recognized as a dynamic, professional organization which provides high quality analytical services to the environmental market.

It will consistently meet client expectations while providing a challenging work environment for its employees and acceptable profit margins for its shareholders.

#### 1.2 POLICY STATEMENT

Chemtech is committed to the production of analytical data meeting specific defined quality standards and to continue improvements in all areas of our operation. As a result of having a focus on environmental analyses, an emphasis is placed on timelines of work, meeting data quality objectives, and the legal defensibility of the data. Each operation maintains a local perspective in its scope of services and client relations and maintains a national perspective in terms of quality. Under the guidance of this quality assurance manual, a level of quality, which is acceptable on a national and international scale, is upheld in all Chemtech laboratory operations.

Our corporate goal for all segments of Chemtech operations is to have uniform products and service quality standards, while encouraging local variation to meet state regulations and customer specifics needs. The process of achieving this goal entails continuous evaluation and action. Chemtech management requires documentation of existing practices and improvement action plans at every stage in the analytical measurement process. Documentation is fundamental to the demonstration and management of quality practices in environmental analytical laboratories.

A spirit of innovation is an essential element to the success of Chemtech in solving the complicated analytical problems encountered with environmental samples. This spirit, combined with the discipline and attention to detail required to provide the level of service expected by our customers, is what makes Chemtech stand out among others in this field. This same spirit is what drives continuous quality improvement and which is the keystone to the Chemtech quality program.

Organization and Management Revision Date: November 13, 2005 Quality Assurance Manual

Revision #: 2001-14

Page 2 of 71

#### 2. ORGANIZATION AND MANAGEMENT

#### 2.1 ORGANIZATIONAL ENTITY

Chemtech, located in Mountainside, New Jersey, is a privately held independent analytical laboratory established in 1967. Chemtech is incorporated in the State of New York and registered to do business in the State of New Jersey. Our Directors, many of who are also major shareholders are acutely aware of the dynamics of our industry, the changing technology, and need for capital investment. Capital for investment in technology and expansion is mainly derived from operating profits and our shareholders. We have been successful in acquiring the necessary equipment, software and automation necessary to be a leader in the analytical community.

#### 2.2 MANAGEMENT RESPONSIBILITIES

Objective: The laboratory has an established chain of command as detailed in the Organizational Chart. The responsibilities of the management staff are linked to the President of Chemtech who establishes the strategy and direction for all company activities.

President: Primarily responsible for all operations and business activities. Develops and implements strategies, initiatives and direction for the company. Delegates authority to Laboratory Directors, all Managers, and Quality Assurance/Quality Control Director to conduct day to day operations and execute quality assurance duties.

Chief Operating Officer/Technical Director: To facilitate uniformity and focus in all aspects of the company's technical affairs; including, Quality Assurance, Information Systems, and Organic and Inorganic technical direction. Strives to align the strategies, initiative and direction of technical affairs with the strategic direction of the company. Reports to the President.

Quality Assurance/Quality Control (QA/QC) Director: To implement, supervise, and facilitate responsibility for all QA activities established by the Quality Program. Reports to the President.

Laboratory Manager: To plan, direct, and control the day to day company's operational performance expectations. Reports to the Chief Operating Officer/Technical Director.

Organization and Management Revision Date: November 13, 2005 Quality Assurance Manual

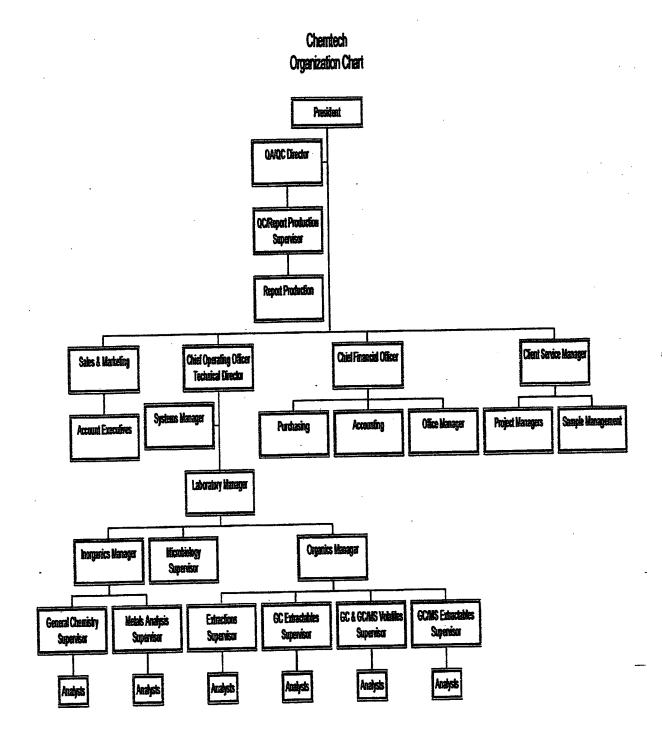
Revision #: 2001-14

Page 3 of 71

**Department Managers:** To supervise, plan, direct, and control the day to day responsibility of a specific laboratory department. Report to Laboratory Manager.

**Department Supervisors:** To supervise day to day responsibility of a specific laboratory department. Report to Department Manager.

Page 4 of 71



Management Relationship

Revision Date: November 13, 2005

Quality Assurance Manual

Revision #: 2001-14

Page 5 of 71

## 3. RELATIONSHIP BETWEEN MANAGEMENT, TECHNICAL OPERATIONS, SUPPORT SERVICES, AND THE QUALITY SYSTEM

Objective: The members of the management team have defined responsibility for the Quality Program. The development and implementation of the Quality Program is the responsibility of Quality Assurance/Quality Control Director. The implementation and operation of the Program is the responsibility of the operations management.

**President:** Responsible for all quality activities including the overall responsibility of implementing the Program. Is the primary alternate in the absence of QA/QC Director. Authorizes the QA/QC Director to design, implement, and coordinate the Program.

Chief Operating Officer/Technical Director: Responsible for executing and coordinating the Program in all laboratory departments. Responsible to certify and document that personnel have the appropriate education and or technical background to perform the tests for which the laboratory is accredited to perform. Responsible for the development and implementation of corrective actions, including the authority to delegate Quality Program implementation responsibilities.

Quality Assurance/Quality Control Director: Responsible for the establishment, execution, support, training, and monitoring of the Quality Program. Identifies all product, process, or operational defects through statistical monitoring and audits including implementation of corrective action. Audits corrective actions for compliance with the Program.

Laboratory Manager: Responsible for coordinating and monitoring the requirements of the Quality Program in the laboratory. To assure that subordinates follow the requirements of the Quality Program. Implement corrective actions as necessary to address quality deficiencies. Is the primary alternate in the absence of Technical Director

**Department Managers:** Responsible for implementing the requirements of the Quality Program in their departments. To assure all subordinates and analysts follow the requirements of the Quality Program. Implement corrective actions as necessary to address quality deficiencies.

Department Supervisors: Responsible for implementing the requirements of the Quality Program within their department. To assure all analysts follow the requirements of Quality Program. Implement corrective actions as necessary to address quality deficiencies.

Management Relationship

Revision Date: November 13, 2005

Quality Assurance Manual Revision #: 2001-14

Page 6 of 71

Analysts: Responsible for applying the requirements of the Quality Program to the analyses they perform. To evaluate QC data and initiate corrective action for quality control deficiencies within their control. Implement corrective actions as directed by superiors.

Support Services: Sample Management, MIS, Client Services and the Account Executives are responsible for applying the applicable requirements of the Quality Program to their specific tasks.

Revision Date: November 13, 2005

**Quality Assurance Manual** 

Revision #: 2001-14

Page 7 of 71

#### 4. JOB DESCRIPTIONS OF KEY STAFF

Objective: Job descriptions of key positions are defined to communicate a clear understanding of the duties and responsibilities including reporting relationships.

President: Responsible for all business activities including the strategic direction, mission and expectations of the company. Builds a strong, cohesive management team that is constantly focused on improving the operating, technical and financial performance of the company.

Chief Operating Officer/Technical Director: Coordinates the operational activities and the technical direction of the laboratory. Responsible to certify and document that personnel have the appropriate education and or technical background to perform the tests for which the laboratory is accredited to perform. Develops the strategy to evaluate and new methods, technology and objectives. Provides assistance and leadership to management teams to implement new innovated technologies. Reports to the President.

Quality Assurance/Quality Control Director: Establishes and audits the company quality program. Provides technical assistance to ensure that the procedure and data quality is technically sound, legally defensible and consistently meets the objectives of the QA Manual. Reports to the President.

System Manager: Provides the operational support for all information systems. Develops and implements MIS software to meet the strategic and technical goal of the company. Reports to the Technical Director.

Client Service Manager: Responsible for the planning, directing and control of the Sample Management Department and the Project Management staff. Supervises the sample log in operation and coordinates the project management activities. Communicates client expectations to the laboratory regarding analytical and reporting requirements. Reports to the President.

Laboratory Manager: Provides the technical, operational and administrative leadership through planning, allocation and management of personnel and equipment resources. Maintains a clearly qualified model of laboratory capacity. Uses this model as a basis for controlling the flow of work into and through the laboratory. Reports to the Technical Director.

**Department Manager:** Directs, plans and controls the operations of the department. Supervises daily production to ensure compliance with the requirements of the Quality Program and client expectations. Reports to the Laboratory Manager.

Job Descriptions

Revision Date: November 13, 2005

**Quality Assurance Manual** 

Revision #: 2

2001-14

Page 8 of 71

**Department Supervisor:** Provides supervision and directions for the group. Implements the daily analysis schedule. Ensures that the group and the analytical data are in compliance with the Quality Program. Reports to the Department Manager.

**Approved Signatories** 

Revision Date: November 13, 2005

Quality Assurance Manual

Revision #: 2001-14

Page 9 of 71

#### 5. APPROVED SIGNATORIES

Objective: For traceability of data and related documents procedures are required which detail the authorization of signature approvals of data and information within Chemtech. A log of signatures and initials of all the analytical staff is maintained in the QA/QC office for cross-reference check.

#### SIGNATURE AUTHORITY 5.1

President: Authorizes contracts and binding agreements.

Chief Operating Officer/Technical Director: Approves the QA policy and SOP's and approves final reports in the absence of QC supervisor and QA/QC Director.

Quality Assurance/Quality Control Director: Approves SOP's, and the QA Plan. Approves final reports in the absence of QC supervisor.

- 5.2 SIGNATURE REQUIREMENT: All laboratory activities, commencing with sample receipt through the release of data, are approved by appropriate personnel by initialing or signing and dating the documents. A document is signed or initialed by an employee, is within their limits of authority. All raw data are initialed and dated by the analyst conducting the analysis. All signatures and initials can be cross-referenced to the signatures and initial log.
- SIGNATURE AND INITIAL LOG: The QA/QC office keeps a logbook of all 5.3 signatures and initials of all technical personnel. New technical employee's signatures and initials are added to the logbook on the first day of their employment. Ex-employee signatures are kept on file but annotated with the last day of employment.

#### PERSONNEL TRAINING 6.

Objective: To ensure that all analysts are properly trained, acquire an adequate amount of experience prior to performing independent analyses and maintain technical competence. These factors are an essential part of the laboratory QA Program.

- EMPLOYEE ORIENTATION AND TRAINING: All new employees go through 6.1 a training period which includes introducing new personnel to Chemtech company policies, QA/QC practices, safety and health, and ethics training in addition to training related to their job functions. The training period extends approximately 1 to 6 months, depending upon the level of experience of the individual.
- PERSONNEL QUALIFICATIONS AND TRAINING: All technical employees at 6.2 Chemtech fulfill the educational, work experience, and training requirements for their positions as outlined in their job description. As workload permits, Chemtech encourages cross training of personnel as appropriate.

All employees must undergo laboratory health and safety training and ethics training and must read laboratory QA Manual. A signed and dated statement from each technical employee that they have read, understood, and are using the latest version of the laboratory QA manual and SOP's is maintained in their training file.

A signed and dated statement from each employee that they have read, acknowledged and understood their personal ethical and legal responsibilities is kept in their training record.

The analysts are also required to take any QA/QC training (Introduction to Quality Assurance and specialized QC courses) provided by the QA/QC Director.

TECHNICAL SKILLS: Analysts are initially qualified by education with a 6.3 minimum of a BS degree in Chemistry, Physical and/or Biological sciences. Every new analyst is trained, regardless of education and outside experience, in the individual analytical procedures by a senior analyst. All Chemtech analyst capabilities are determined initially with PT studies and Initial Demonstration of Capability studies.

When new equipment is purchased, appropriate Chemtech personnel are trained locally by the manufacturer, vendor or at the manufacturer's training course.

Any significant change to an analytical system requires that the analyst performs an initial demonstration of precision and accuracy, and recalibration of the instrument. For example, replacing a column in a gas chromatograph, cleaning the mass spectrometer ion source, etc.

6.4 Training Records: Training records for technical employees are kept in the QA office. The Technical Director certifies and document's that all technical employees have the appropriate education and or technical background to perform the tests for which the laboratory is accredited to perform. It is the responsibility of each employee to assure that records of completed training are provided to the QA/QC Director to update his/her personnel file.

In addition to the ethics and QA manual statements the employee record file contains: read receipts of SOP's, a Demonstration of Capability for each accredited method; documentation of any training courses, seminars, and/or workshops; and documentation of continued proficiency to perform each test.

Continued analyst proficiency can be achieved by one of the following: acceptable performance of blind samples for each accredited method; through the analysis of Laboratory Control Samples - at least four consecutive Laboratory Control Samples with acceptable levels of precision and accuracy.

6.5 Training requirements for key positions: Training requirements are assigned depending on the position and department the employee is in.

Quality Assurance Officer: The QAO must have ample knowledge of the laboratory procedures. Have at least 5 years of laboratory experience preferably in Organics and Have at least 2 years of data review procedures training.

Department Manager- A department manager must have at least 3 years of experience in the area of Supervision. Must have proper training in methodology and the skill to organize schedule and train personnel for a successful operation of their department

Personnel Training

Revision Date: November 13, 2005

Quality Assurance Manual Revision #: 2001-14

Page 12 of 71

Department Supervisor: A department supervisor must have at least 2 years of experience in the area they are to supervise. Be able to write SOPs

#### 7. ETHICS POLICY

Chemtech provides comprehensive analytical testing services for the qualitative and quantitative assessment of environmental contaminants. Our services are used to meet various regulatory permitting and reporting requirements, determine compliance for both State and Federal environmental regulations to assess potential present and future environmental liability or health risks.

Our policy to conduct our business with honesty and integrity; to produce accurate and usable data, and provide our employees with guidelines leading to an understanding of the ethical and quality standard required by Chemtech.

7.1 CODE OF ETHICS: Chemtech is managed in accordance with the following principals:

To produce analytical test results that are accurate and meet the requirements of our Quality program.

To operate our laboratory in a manner that protects the environment, as well as the health and safety of all our employees.

To provide employees with guidelines leading to an understanding of the ethical and quality standards required by Chemtech.

To report analytical data without any considerations or self-interests.

To provide analytical services in a confidential, truthful, and candid manner.

To abide by all Federal, State, and Local regulations that effects our business.

7.2 EMPLOYEE ETHICS TRAINING: Each employee receives ethics training during employee orientation and must sign an Employee Ethics Statement. During the orientation, an employee is made aware of the ethical and legal responsibilities including potential punishments and penalties for improper, unethical or illegal actions. The Employee Ethics Training program is updated annually (or more frequently if required). Ethics Training Seminars are presented annually, and all employees are required to attend. Personnel files are updated to include the date the employee attended the annual Ethics Training Seminar.

Revision Date: November 13, 2005

## 8. FACILITIES AND RESOURCES FOR NEW ANALYTICAL PROJECTS AND IMPLEMENTING CLIENT REQUIREMENTS

Objective: To ensure that appropriate facilities and resources are available to meet the demand for new analytical projects and process to implement client requirements.

8.1 REVIEW OF NEW ANALYTICAL PROJECTS: A Project Chronicle (PC) is prepared by the Account Executive prior to a quotation preparation and or an award, and presented to the Technical Director and his staff for review and comments. The PC outlines all the client requirements and includes copies (if available) of the clients Quality Assurance Project Plan (QAPP), Statement of Work (SOW) and contractual provisions. The PC and associated information are scanned and stored on the network for future reference.

A "Kick Off Meeting" chaired by the Technical Director is scheduled to discuss the PC and its associated information. Project Management, the QA/QC Director, Laboratory Manager, including appropriate Department Managers/Supervisors, Sample Management and MIS staff are present to familiarize themselves with the requirements, and are asked to participate in the planning and implementation of the project.

8.2 RESOURCE AVAILABILITY: Chemtech maintains a 30,000 square foot laboratory designed for maximum efficiency and safety. There is a redundancy of equipment to ensure ample equipment resources. The laboratory is adequately staffed by a highly skilled group of chemists with diversified experience in environmental analysis; and managed by a knowledgeable team of professionals who are committed to quality and client satisfaction.

The laboratory management maintains a clearly defined model of laboratory capacity based upon historical data. This model is the basis for controlling resources, management of personnel and equipment, including the flow of work into and through the laboratory.

8.3 NEW WORK COORDINATION: Project Management coordinates the project logistics with the client and Sample Management in addition to overseeing the analytical progress through the laboratory. Sample Management initiates the Log-In process, which includes requirements, detailed in the PC and Quotation.

Prior to release of data to the client the Department Managers, Supervisors, and the QC/Report Production staff review the data for

Facilities and Resources for New Work Revision Date: November 13, 2005

Quality Assurance Manual Revision #: 2001-14

Page 15 of 71

completeness, accuracy, and conformance with applicable regulatory and clients requirements.

Revision Date: November 13, 2005

Quality Assurance Manual Revision #: 2001-14

Page 16 of 71

#### 9. CLIENT CONFIDENTIALITY

Objective: To design and implement policies and procedures to protect the confidentiality and proprietary rights of our clients.

#### 9.1 CLIENT CONFIDENTIALITY

Information related to a Client and or a Project are entered and stored in Chemtech's LIMS SQL Server. The information is entered by employees with the appropriate level of authority. Security levels within Chemtech's system define an individuals access to information levels. Information on the Server is backed up at defined intervals, and the backup information is stored offsite.

Analytical data is prepared in a report format as required by the client. The report is copied and scanned electronically. A paginated copy of the report is distributed as directed by the client while the original copy and related information is kept on site in the Document Storage Area. The scanned copy is archived on our LIMS Server. Access to the Document Storage Area or the LIMS Server is limited by the employee's security authorization levels. The files are archived for a period of five years.

Electronic data stored in Chemtech's database is protected by a variety of systems including, Virtual Private Networks (VPS), firewalls, log in user names and passwords. A Gateway system is also employed to restrict access to specific users based upon their authorization level.

Reports or client information requested by a third party must be accompanied by written authorization from our Client. Client information is released when directed by a subpoena from a court with valid jurisdiction. The Client is promptly notified of the subpoena requesting their information.

Revision #: 2001-14

Page 17 of 71

#### 10. CLIENT COMPLAINTS RESOLUTIONS

Objective: To establish a system to address and resolve client complaints regarding any laboratory activity. The process for dealing with complaints must include a procedure, documentation, corrective action, and monitoring of the implemented corrective action.

- PROCEDURE: When a client calls or e-mails an inquiry regarding a project 10.1 or a report to the Project Manager (PM), the PM receiving the call (or email) summarizes the client issue or requests the client to mail/fax any Once a formal request is received, the PM prepares a Corrective Action (CA) report form, that includes the client name, laboratory project numbers(s), summary of issues, PM initials and date. The CA report form is an assigned a four digit tracking number, by the The CA report form is submitted to the Technical OC Supervisor. Director, who assigns the CA report form to the affected department supervisor to review, comment and correct the issue within 24 hours. All technical and data reporting inquiries are submitted to the QA/QC Director for review. Once the response comes back from the laboratory the QC Supervisor and QA/QC Director reviews it and if satisfactory the CA report form is filed in the QA/QC office. The client is sent the corrected information.
- 10.2 DOCUMENTATION: Client's complaints are documented using CA report form, which originates from PM office or QA Officers office. The original communication (phone log, e-mail, or fax) is kept in the PM office while closed CA report form is filed in the QC office. The CA report contains the date and name of the person receiving the complaint, a description of the complaint, source of the complaint, the resolution, and any written material accompanying the complaint. The CA database is updated by QA/QC office to which only QA/QC Director and QC officer has excess. A database is maintained where client inquiries are logged-in including date, client name, project number, department in question, and a summary of the inquiry and CA taken.
- 10.3 CORRECTIVE ACTION: The CA report is entered in a database to monitor systematic defects. The appropriate department supervisor must deal with the complaint by responding to the inquiry. The response must address the issue(s) and provide an explanation and resolution. The response may involve reprocessing of data and issuing a revised data report. The QA/QC Director reviews the CA for a persistent defect in case the respective SOP needs modifications.

Client Complaint Resolutions Revision Date: November 13, 2005 **Quality Assurance Manual** 

Revision #: 2001-14

Page 18 of 71

QA/QC AUDITING: The CA is entered in a database to monitor systematic defects. The QA/QC Director investigates complaints and promptly audits all areas of activity to assure that the CA implemented has resolved the defect. If the defect persists, the QA/QC Director, and Department Manager and Supervisor develop and implement an effective process. When the defect is resolved, monitoring is incorporated as a part of the annual system audit. For a detailed information on client inquiries refer to the SOP for handling client inquiries.

Sample Management Process Revision Date: November 13, 2005 Quality Assurance Manual

Revision #: 2001-14

Page 19 of 71

#### 11. SAMPLE MANAGEMENT PROCESS

Objective: To establish a system to process client requests for analytical services and samples upon arrival at the laboratory. Please refer to P204-Chain of Custody SOP and P250-Log in SOP for detailed information for sample receipt, containers and all other related information.

- 11.1 ANALYTICAL REQUEST: Project Managers prepare an Analytical Request (AR) Form from the information detailed on the Project Chronicle (PC) and provide a copy to Sample Management in order to initiate a sampling event.
- 11.2 SAMPLE CONTAINER PREPARATION AND SHIPMENT: All bottle orders prepared from the Analytical Requests are prepared with bottles that are certified pre-cleaned by the manufacturer according to US EPA specifications. Reagent grade preservatives are added to the bottles at the laboratory. All preservative solutions are checked to assure that they are free of contamination. Chemtech utilizes laboratory reagent water for trip and field blanks.

Bottle orders are prepared by one individual and checked by a second individual to ensure that the bottle order was properly prepared. The bottles are then relinquished from Sample Management to the appropriate courier. When the bottles arrive at the client destination, the courier will then relinquish custody of the bottles to the client or the client designee.

Samples arrive at the laboratory via Chemtech couriers, common carrier, or client delivery. All shipments and deliveries of samples are received through the shipping & receiving door located in the rear of the facility. All deliveries enter in the same location and go directly to the sample room. The SOP's for Chain of Custody (CoC) and Sample Acceptance and Receipt are followed.

Sample Management personnel will sign for all shipments received and notify the Sample Custodian immediately. The samples are then relinquished to the Sample Custodian.

A sample or sample container is considered to be in custody if: it is in the persons' actual possession; it is in the person's view after being in their physical possession; it was in their possession and then locked in a refrigerator or sealed in a cooler; it is in a designated secure area.

11.3 SAMPLE ACCEPTANCE

Upon receipt of sample coolers at the laboratory, coolers are examined for damaged or broken custody seals. Records of the condition of the custody seals and coolers are recorded on the Laboratory Chronicles. If seals and coolers are intact, the sample acceptance procedure is continued. If they are not intact, the appropriate Laboratory Project Manager (PM) is notified. The PM will seek guidance from the client whether to proceed with the analysis of the samples or discard or send back the samples. The PM will communicate information given by the Client to Sample Management via a Record of Communication.

#### 11.4 SAMPLE RECEIPT

Once the samples have been accepted, the sample receipt process begins. The Sample Custodian will line up the samples according to the CoC and begin comparing the information documented on the CoC to the samples received. Any deviation noted from the CoC or non-conformance is recorded on the Laboratory Chronicle and communicated to the appropriate Laboratory Project Manager.

#### 11.5 SAMPLE CUSTODIAN RESPONSIBILITIES

The Sample Custodian must take a cooler temperature soon after sample receipt and record it on the Laboratory Chronicle and the Field CoC. This will verify that the samples were transported and received at the required temperature.

The Sample Custodian must ensure that samples are received in good condition and ensure that samples listed on the CoC are all present. The Sample Custodian must compare the sample identification on the CoC to the labels on the bottles, and make sure that the information on the CoC exactly matches the bottle labels. Verification that enough volume has been received for the sample tests requested and absence of headspace for volatile analysis must be noted.

The Sample Custodian must ensure that all samples are properly preserved. Appropriate preservation of samples is determined by checking the pH of the samples. Sample Management Staff are issued a reference table that lists the tests methods we utilize and their appropriate preservation techniques. The pH of the samples is recorded on the Laboratory Chronicle.

The Sample Custodian must sign the CoC and other documentation received with the samples. Documentation of custody is initiated when the field sampler is collecting the samples. Custody documentation includes all information that provides a clear record of the sample identification,

time of collection, and collection chronology. This record is kept on the Chemtech or Client CoC Forms.

The Sample Custodian must place the samples in storage or relinquish to the appropriate laboratory analyst after labeling the samples with the unique laboratory number.

#### 11.6 SAMPLE MANAGEMENT STAFF RESPONSIBILITIES

Sample Management staff must review the Field CoC submitted by the Sample Custodian and procure the correct Analytical Request (AR) form from the file. They must compare the AR to the Field CoC and ensure that all information on the CoC follows the AR exactly. If not, contact the appropriate PM for further guidance. The PM should resolve all discrepancies between the AR and the CoC prior to sample login. Once the discrepancies are resolved the PM will issue a Record of Communication to document the client's instructions.

If an unapproved rush analysis is received, Sample Management staff must inform the PM, and contact the appropriate Department Supervisor via email. Proceed to login the samples. Create a folder with the original Field CoC, the sample and delivery tickets, any third party delivery documentation, and the login report.

#### 11.7 SUBCONTRACTED ANALYSIS

Projects sometimes contain analyses that Chemtech does not perform. In order to give a high level of service to our clients, Chemtech will subcontract these analyses to other laboratories. All subcontracted laboratories must meet vigorous standards set forth by QA/QC Department as well as standards established for the environmental laboratory industry. A documented procedure is followed to qualify laboratories for subcontracting and a list in maintained in our QA/QC Department. Procedures have also been established to assure that CoC is maintained and the subcontract laboratory achieves all client objectives.

A subcontracted laboratory must provide our QA/QC Department the following information in order to be used as a subcontractor: a valid state certification for the required tests, Quality Assurance Plan, PT Studies for the required tests, and copies of the SOP's for the required tests.

The subcontracting procedure is a documented procedure that is initiated by an Account Executive. The Account Executive is responsible for ensuring that the subcontracted laboratory meets all client specifications. When a client issues a Scope of Work, the Account Executive thoroughly reviews the document. If subcontracting is required, the Account

Executive will consult the established subcontracting list that is issued by the QA/QC Department. If a particular analysis is not conducted by one of these approved laboratories, the Account Executive must then request that QA/QC Director locates and approves a laboratory for the requested analysis.

Once a subcontract laboratory is found, the Account Executive must contact the laboratory to communicate the client's requirements and request a quotation from the laboratory. The Account Executive then creates a Project Chronicle that documents the client requirements, the subcontract laboratory to be used, and attaches a quote to this document. The Project Chronicle is an electronic document available to all appropriate personnel. This procedure is followed prior to the receipt of samples from the client.

When the client calls to order the bottles for the project, the PM initiates an Analytical Request Form (AR) from the information documented on the Project Chronicle. The AR includes the information for the subcontract laboratory as well as any special bottle instructions for the subcontracted tests, and is given to Sample Management. Sample Management then creates the bottle order and sends it to the client.

Upon receipt of the samples, the Sample Custodian will give a copy of the CoC to the Client Service Manager. The Client Service Manager will then create a subcontract chain of custody and procure a Purchase Order from Accounting. This documentation is given to Sample Management to send to the subcontract laboratory along with the samples. A copy of this documentation is retained and placed in the login folder and double-checked by the appropriate Project Manager.

All subcontracted samples are logged into the LIMS System to allow for sample tracking and data reporting. A PM will track the samples to ensure that client deadlines and specifications are met. Once the data packages arrive from the subcontract laboratory, the PM will check the report for completeness. If the data package is deficient, the PM will immediately notify the subcontract laboratory to remediate the deficiencies. The report is then passed to the QA/QC Department for further review. If any corrective action is required at this point, the QA/QC staff will call the subcontractor laboratory. All data that is subcontracted is clearly designated.

#### 11.8 SAMPLE STORAGE

Chemtech maintains a 40-foot walk-in refrigerator that contains a multitude of shelves. All samples, with the exception of volatiles, are kept

in this refrigerator. The refrigerator temperature is monitored constantly and recorded once a day. All shelves in the walk-in refrigerator are identified with a code. The Sample Custodian assigns samples to a refrigerator shelve and gives the shelve location to Sample Management to login with the sample information. This documented procedure allows the samples to be found very easily.

The volatile refrigerators are located in the Volatile Department and kept secure. All Volatile refrigerators are also monitored for temperature. The temperature is recorded every day in a logbook.

Back-up refrigerators are available should any mechanical problem present itself. All samples are securely moved to the backup refrigerators if necessary.

Only the Sample Custodians are permitted access to sample storage. Analysts create a sample request electronically and send the request to the Sample Custodians. Once received, the Sample Custodians fill out the appropriate paperwork and issue the samples to the Analysts.

Periodically throughout the day, the Sample Custodians will pick up samples from the laboratory and sign them back into storage. Analysts will send the Sample Custodian an email when they finished with the samples. All samples must be back in refrigeration at the end of a shift and the chain of custody is required to be kept at all times.

Analytical Capabilities Revision Date: November 13, 2005

## Quality Assurance Manual Revision #: 2001-14

Page 24 of 71

#### ANALYTICAL CAPABILITIES 12.

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
	SW 5030B/8260B	SW 5030B/SW 8260B
1	SW 5035/8260B	SW5035/SW 8260B
	SW 3585	OLM03.2, OLM04.3
Waletile Occasion by	OLM03.2	OLM04.2
Volatile Organics by GC/MS	OLM04.2	OLC02.1
GC/MS	OLM04.3	OLC03.1
		EPA 524.2
·		EPA 624
	SW 8015B	SW 8015B
	SW 5030B/SW 8021B	SW 5030B/SW 8021B
Volatile Organics by GC	SW 5035/8021B	SW 5035/8021B
_	5 W 3033/00212	EPA 601
[	·	EPA 602
	SW 3510C/SW 8270C	EPA 625
	SW 3520C/SW 8270C	SW 3510C/SW 8270C
	SW 3540C/SW 8270C	SW 3520C/SW 8270C
	SW 3545/SW 8270C	SW 3540C/SW 8270C
Semivolatiles by GC/MS	SW 3580A/SW 8270C	SW 3545/SW 8270C
Semivolatiles by GC/MS	OLM03.2	SW 3580A/SW 8270C
	OLM04.2	OLM03.2, OLM04.3
	SW 3550B	OLM04.2
	OLM04.3	OLC02.1
	<b>G</b>	OLC03.1
	SW 8310	SW 8310
Semivolatiles by HPLC		SW 8330
Semivolatiles by GC	SW 8015B	SW 8015B
Semivolatics by GC	SW 3510C/SW 8081A&/or 8082	SW 3510C/SW 8081A&/or 8082
	SW 3520C/SW 8081A&/or 8082	SW 3520C/SW 8081A&/or 8082
	SW 3540C/SW 8081A&/or 8082	SW 3540C/SW 8081A&/or 8082
Pesticides &/ or PCBs	SW 3545/SW 8081A&/or 8082	SW 3545/SW 8081A&/or 8082
Pesticides & of FCDs	SW 3580A/SW 8081A&/or 8082	SW 3580A/SW 8081A&/or 8082
	OLM03.2	EPA 608
·	OLM04.2	OLM03.2
	OLM04.3	OLM04.2, OLM04.3
Chlorinated Herbicides	SW 8151A	SW 8151A
Volatile Organics by GC/MS	Air Matrix Method: TO-14	

Analytical Capabilities Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 25 of 71

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
		EPA 200.7
		EPA 245.1
	SW 6010B	SW 6010B
Metals	SW 7471A	SW 7470A
Wictais	ILMO4.1	ILM04.1
İ	ILM05.3	ILM05.3
	SW 3050B	SW 3005A
1	·	SW 3010A
Wet Chemistry		
		EPA 305.1
Acidity		SM 18 2310B(4A)
A 23 30 10		EPA 4100B
Alkalinity	enqueste di 190	SM18/19 2320 B
Alkalinity, Bicarbonate		SM18/19 2320 B
	TTD 4 050 0	EPA 350.2
Ammonia	EPA 350.2	SM 18 4500-NH3 B/E
Anions:		
Bromate		
Bromide		1
Chloride		
Fluoride	<del></del>	EPA 300.0
Nitrate	·	·
Nitrite		
Orthophosphate		
Sulfate		
ASTM Leaching Procedure	ASTM 3987	
Biochemical Oxygen		EPA 405.1
Demand (BOD5)		SM 18 5210B
	CW 0211	EPA 320.1
Bromide	SW 9211	EPA 300.0
Carbon Dioxide	******	EPA 310.1
Carbonaceous BOD .		SM 18/19 ED 5210B
(cBOD)		
Cation-Exchange Capacity	SW 9080	
Catton-Exchange Capacity	SW 9081	
		EPA 410.1
Chamical Owner Daman		EPA 410.2
Chemical Oxygen Demand	· ·	EPA 410.3
(COD)		SM 18 5220C
		SM 18 5220D

Analytical Capabilities
Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 26 of 71

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods			
		EPA 325.3			
011-11-	SW 9212	EPA 300.0			
Chloride	SW 9056	SM 18 4500-C1 C			
Chlorine Demand		SM 18/19 ED 2350B			
Chlorine Demand		EPA 110.2			
Color	-	SM 18 2120B			
		EPA 120.1			
Conductivity	SW 9050A	SM 18/19 ED 2510 B			
Corrosivity	SW 9040B	SW 9040B			
Corrosivity Toward Steel	SW 1110	SW 1110			
Corrosivity Idward Steel	577 222	EPA 335.2			
Cyanide	SW 9010B	EPA 340.1			
Cyanide	211 30102	SM 18/19 4500-CN C&E			
	SW 9010B	EPA 335.1			
Cyanide-Amenable	SW 9213	SM 18 4500-CN G			
		SM 18 2710F			
Density	******	ASTM D1298			
Density		ASTM 5057			
		EPA 360.1			
		EPA 360.2			
Dissolved Oxygen		SM 4500-O C			
	•	SM 4500-O G			
	SW 3610	SW 3610			
	SW 3620	SW 3620			
Extractions	SW 3640	SW 3640			
	SW 3665	SW 3665			
	SW 8440	SW 8440			
		SM 18 3500 B			
Ferrous Iron		SM 19 3500FE-D			
	SW 1010	SW 1010			
Flashpoint	SW 1030	SW 1030			
Foaming Agents		SM 18/19 ED 5540 C			
		EPA 340.2			
Fluoride	SW 9214	SM 18 4500 F-B, C			
		EPA 300.0			
Hardness, Calcium		EPA 200.7			
Hardness, Total	****	EPA 130.2 SM 18 2340 B OR C			

Analytical Capabilities
Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 27 of 71

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
Hexavalent Chromium	SW 3060A/SW 7196A	SM 18/19 ED3500-Cr D
	SW 1010	SW 1010
Ignitability	SW 1030	SW 1030
Methylene Blue Active		EPA 425.1
Substances (MBAS)	generate pro-	SM 18/19 ED 5540 C
Surfactants		
	SW 9210	EPA 353.2
Nitrate	SW 9056	SM 18 4500-NO3 F
		EPA 300.0
		EPA 353.2
Nitrate/Nitrite	EPA 353.2	SM 18 4500-NO3 F
		EPA 300.0
	EPA 353.2	EPA 354.1
Nitrite	SW 9056	SM 18 4500-NO2 B
	5 W 7030	EPA 300.0
Odor		SM 18 2150 B
Oil & Grease	SW 9070, SW 9071	EPA 413.1
On & Grease	3 W 3070, 3 W 3071	EPA 1664A
	EPA 351.1, .2, .3 .4	EPA 351.1, .2, .3 .4
Organic Nitrogen	EPA 350.1.2.3	EPA 350.1.2.3
Organic Nitrogen	EFA 330.1.2.3	SM 18/19 4500-NH3
		BCEFGH
Orthophosphate		EPA 365.2
Ormophosphate		SM 18/19 ED 4500-P,E
Paint Filter Test		SW 9095
Petroleum Hydrocarbons	EPA 418.1	EPA 418.1
	SW 9040B	EPA 150.1
pН	SW 9045C	SM 18 4500-H+-B
	3 W 3043C	SW 9041A
	SW 9065	
Phenolics	SW 9066	EPA 420.1
	SW 9067	
Phosphorus, Ortho		EPA 365.2
i nospiiotus, Otulo		SM 18/19 4500 P-E
Phosphorus, Total	EPA 365.2	EPA 365.2
		SM 18 4500-P B5+E
Reactive Cyanide	SW 7.3.3.2 Rev 3	SW 7.3.3.2 Rev 3
Reactive Sulfide	SW 7.3.4.2 Rev 3	SW 7.3.4.2 Rev 3
Dadam Datastal	SM 18 2580	SM 18 2580
Redox Potential		ASTM D1498

Analytical Capabilities
Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 28 of 71

A. Letical Fraction	Soil/Solid Matrix	Aqueous Matrix
Analytical Fraction	Methods	Methods
Residual Chlorine		SM 18 4500-Cl G
		EPA 160.5
Settleable Solids		SM 18/19 2540 F
Silica	SW 6010B	EPA 200.7
SPLP Extraction	SW 1312	SW 1312
DI IA ZAMANA	SW 9035	EPA 375.4
Sulfate	SW 9036	EPA 300.0
·	SW9038	SM 18/19 4500SO4 F, C or D
		EPA 376.1
Sulfide	SW 9215	SM 18/19 4500-S E
Sumos		SW 9215
Sulfide, Acid Soluble &	CT. 0000D	SW 9030B
Insoluble	SW 9030B	SW 9031
TCLP Leaching Procedure	SW 1311	SW 1311
TCEF Ecacining Freeduce		EPA 170.1
Temperature	SW 2550B	SM 18/19 2550B
Total Dissolved Solids		EPA 160.1
(TDS)	special control of the control of th	SM 18 2540 C
Total Kjeldahl Nitrogen		EPA 351.3
(TKN)	EPA 351.3	SM 18/19 4500-N Org B or C
Total Organic Carbon	SW 9060	EPA 415.1
(TOC)	Lloyd Kahn	SM 18/19 5310 B, C or D
Total Organic Halides		SW 9020B
(TOX)	SW 9020B	EPA 450.1
Extractable Organic	SW 9023	SW 9023
Halides (EOX)		EPA 160.3
Total Solids (TS)	EPA 160.3	SM 2540 B
		EPA 160.2
Total Suspended Solids		SM 2540 D
(TSS)		EPA 160.4
Total Volatile Solids (TVS)		EPA 180.1
Turbidity		SM 18/19 2130 B
Volatile Suspended Solids (VSS)		PA 160.4
Microbiology		
	SW 9131	SM 18/19 9221D
Total Coliform		SM 18/19 9222B
	SW 9132	
Fecal Coliform		SM 18/19 9222B or D

Analytical Capabilities
Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 29 of 71

Analytical Fraction	Soil/Solid Matrix Methods	Aqueous Matrix Methods
Escherichia coli		SM 18/19 9222B SM 18/19 9221E
Heterotrophic bacteria (Standard Plate Count)	SM 18/19 9215D	SM 18/19 9215B

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 30 of 71

13. M	AJOR EQ	UIPMENT					
Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
		GC/MS SEMI VOA	Lab				
GC	BNA-A	Hewlett Packard 5890 Series II	3223A43380	June 1992	July 2001	BNA Lab	used
MSD	BNA-A	Hewlett Packard 5971 Series	2919A00378	June 1992	July 2001	BNA Lab	used
Auto Sampler	BNA-A	Hewlett Packard 18596B	2718A04705	June 1992	July 2001	BNA Lab	used
Injector Tower	BNA-A	Hewlett Packard 7673 A	3048A24622	June 1992	July 2001	BNA Lab	used
Controler	BNA-A	Hewlett Packard 7673 A 18594B	3330A32763	June 1992	July 2001	BNA Lab	used
Computer	BNA-A	Minta	CN548014089	June 1992	July 2001	BNA Lab	used
GC	BNA-B	Hewlett Packard 5890	2750A18411	July 1994	July 2001	BNA Lab	used
MSD	BNA-B	Hewlett Packard 5971 Series	3188A03673	July 1994	July 2001	BNA Lab	used
Auto Sampler	BNA-B	Hewlett Packard 18596B	3021A21493	July 1994	July 2001	BNA Lab	used
Injector Tower	BNA-B	Hewlett Packard 7673 A	2704A04914	July 1994	July 2001	BNA Lab	used
Controler	BNA-B	Hewlett Packard 7673 A 18594B	320A28097	July 1994	July 2001	BNA Lab	used
Computer	BNA-B	Minta	93001897	July 1994	July 2001	BNA Lab	used
GC	BNA-E	Hewlett Packard 5890 Series	4500030441	Dec 2002	Jan 2003	BNA Lab	new
MSD	BNA-E	Hewlett Packard 5973	4591422501	Dec 2002	Jan 2003	BNA Lab	new
Auto Sampler	BNA-E	Agilent 7683 Series	4514413296	Dec 2002	Jan 2003	BNA Lab	new
Injector Tower	BNA-E	Agilent 7683 Series	CN13922355	Dec 2002	Jan 2003	BNA Lab	new
Computer	BNA-E	Hewlett Packard Vectra VL 420 DT	4522100267	Dec 2002	Jan 2003	BNA Lab	new
GC	BNA-F	Thermo Finnigan Trace Ultra	20041853	March 2004	March 2004	BNA Lab	new
MSD	BNA-F	Thermo Finnigan Trace DSQ	100166	March 2004	March 2004	BNA Lab	new
Auto Sampler	BNA-F	Thermo Finnigan AS 3000	20041111	March 2004	March 2004	BNA Lab	used
Refrigerator	BNA-Ref-	Roper	ED2933135	May 1999	July 2001	BNA Lab	used
Refrigerator	BNA-Ref	White Westinghouse	BA54880352	August 1999	July 2001	BNA Lab	used
		GC SEMI VOA					
HPLC	HPLC-1	Hewlett Packard Series 1100 DAD	JP73007001/ US72101011/ US72101340	May 1999	July 2001	Pest Lab	used
Auto sampler	HPLC-1	Hewlett Packard 1313 AS	US72102636	May 1999	July 2001	Pest Lab	used
Computer	HPLC-1	HP Vectra XA	US73465640	May 1999	July 2001	. Pest Lab	used
ECD	ECD-6	Hewlett Packard 5890 Series II	3235A44756	May 1999	July 2001	Pest Lab	used
Auto Sampler	ECD-6	Hewlett Packard 7673A	2718A07968	May 1999	July 2001	Pest Lab	used

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 31 of 71

Inject Tower	ECD-6	Hewlett Packard 7673A	2546A01644	May 1999	July 2001	Pest Lab	used
Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
Controller	ECD-6	Hewlett Packard 7673A	2546A01644	May 1999	July 2001	Pest Lab	used
Computer	ECD-6	Expert Group	CN548014091	May 1999	July 2001	Pest Lab	used
ECD	ECD-5	Hewlett Packard 5890 Series II		June 1992	July 2001	Pest Lab	used
Auto Sampler	ECD-5	Hewlett Packard 7673A	3137A26240	June 1992	July 2001	Pest Lab	used
Inject Tower	ECD-5	Hewlett Packard 7673A	3033A23016	June 1992	July 2001	Pest Lab	used
Controller	ECD-5	Hewlett Packard 7673A	3329A32728	June 1992	July 2001	Pest Lab	used
Computer	ECD-5	Expert Group 36X MAX		June 1992	July 2001	Pest Lab	used
ECD	ECD-1	Shimadzu AOC-20	C11144007149KG	Feb 2004	Feb 2004	Pest Lab	used
Auto Sampler	ECD-1	Hewlett Packard 7673A	2718A07921	June 1992	July 2001	Pest Lab	used
Inject Tower	ECD-1	Hewlett Packard 7673A	2843A11812	June 1992	July 2001	Pest Lab	used
Controller	ECD-1	Hewlett Packard 7673A		June 1992	July 2001	Pest Lab	used
Computer	ECD-1	Seventeam ·	3862A403	June 1992	July 2001	Pest Lab	used
ECD	ECD-8	Hewlett Packard 5890 Series II	2541A06937	May 1999	July 2001	Pest Lab	used
Auto Sampler	ECD-8	Hewlett Packard 7673A	3043A23328	May 1999	July 2001	Pest Lab	used
Inject Tower	ECD-8	Hewlett Packard 7673A		May 1999	July 2001	Pest Lab	used
Controller	ECD-8	Hewlett Packard 7673A	2730A08254	May 1999	July 2001	Pest Lab	used
ECD	ECD-2	Hewlett Packard 5890	2618A07910	May 1999	July 2001	Pest Lab	used
Refrigerator	GC ext- Ref 1	General Electric	ST734619	May 1999	July 2001	Pest Lab	used
Refrigerator	GC ext- Ref 2	General Electric	MT841152	May 1999	July 2001	Pest Lab	used
FID	FID-1	Hewlett Packard 5890	2643A09798	May 1999	July 2001	Pest Lab	used
Auto Sampler	FID-1	Hewlett Packard 7673A	2718A08986	May 1999	July 2001	Pest Lab	used
Inject Tower	FID-1	Hewlett Packard 7673A		May 1999	July 2001	Pest Lab	used
Computer	FID-1	44X Max Expert Group	-	May 1999	July 2001	Pest Lab	used
Controller	FID-1	Hewlett Packard 7673A	2702A05818	May 1999	July 2001	Pest Lab	used
ECD	ECD-4	Hewlett Packard 5890	3203A40376	May 1999	July 2001	Pest Lab	used
Auto Sampler	ECD-4	Hewlett Packard 7673A	2718A05058	May 1999	July 2001	Pest Lab	used
Inject Tower	ECD-4	Hewlett Packard 7673A	3120A26762	May 1999	July 2001	Pest Lab	used
Computer	ECD-4	ACER 324	93006805	May 1999	July 2001	Pest Lab	used
Controller	ECD-4	Hewlett Packard 7673A	3113A26547	May 1999	July 2001	Pest Lab	used

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 32 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
ECD	ECD-3	Hewlett Packard 5890 ECD Dual		May 1999	July 2001	Pest Lab	used
Auto Sampler	ECD-3	Hewlett Packard 7673A	271A08998	May 1999	July 2001	Pest Lab	used
Inject Tower	ECD-3	Hewlett Packard 7673A		May 1999	July 2001	Pest Lab	used
Controller	ECD-3	Hewlett Packard 7673A	2702A06597	May 1999	July 2001	Pest Lab	used
Computer	ECD-3	Gateway 2000 40X-33	1556740	May 1999	July 2001	Pest Lab	used
		GC/GC MS YOA	Lab				
MSD	MSVOA-	Hewlett Packard 5970		June 1994	July 2001	VOA Lab	used
GC	MSVOA- B	Hewlett Packard 5890	2643A11383	June 1994	July 2001	VOA Lab	used
LCS 2000	MSVOA- B	TEKMAR LCS 2000	90361023	June 1994	July 2001	VOA Lab	used
Auto Sampler	MSVOA-	TEKMAR ALS 2016	91239007	June 1994	July 2001	VOA Lab	used
Computer	MSVOA- B	MINTA ACER 32X	83007353	June 1994	July 2001	VOA Lab	used
MSD	MSVOA- C	Hewlett Packard 5970	2637A01812	June 1994	July 2001	VOA Lab	used
GC	MSVOA- C	Hewlett Packard 5890	2429A02435	June 1994	July 2001	VOA Lab	used
Auto Sampler	MSVOA- C	TEKMAR ALS 6016	93263003	June 1994	July 2001	VOA Lab	used
Concentrator	MSVOA- C	TEKMAR LCS 6000	9322012	June 1994	July 2001	VOA Lab	used
Oven	MSVOA- C	Precision Scientific Air Oven	9402-010	June 1994	July 2001	VOA Lab	used
Computer	MSVOA- C	Expert Group	97001 <i>6</i> 04	June 1994	July 2001	VOA Lab	used
MSD	MSVOA- D	Hewlett Packard 5970	2238A0031	May 1999	July 2001	VOA Lab	used
GC	MSVOA- D	Hewlett Packard 5890	3033A31948	May 1999	July 2001	VOA Lab	used
Auto Sampler	MSVOA- D	Archon 5100 Purge & Trap	12011	May 1999	July 2001	VOA Lab	used
Concentrator	MSVOA- D	OI 4660 Eclipse	A405466419P	2004	Feb 04	VOA Lab	new
Computer	MSVOA- D	MINTA ACER 32X	93007352	May 1999	July 2001	VOA Lab	used

**Document Control** 

Revision Date: November 13, 2005

# **Quality Assurance Manual** Revision #: 2001-14

Page 33 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
MSD	I-AOVZM	Hewlett Packard 5971 Series	334A04258	June 1992	July 2001	VOA Lab	used
GC	MSVOA-I	Hewlett Packard 5890	3235A45496	June 1992	July 2001	VOA Lab	used
Concentrator	MSVOA-I	Ol 4660 Eclipse	338466643P	2003	March 2003	VOA Lab	new
Auto Sampler	MSVOA-I	Ol 4552 Archon	13990	2003	March 2003	VOA Lab	used
Computer	. MSVOA-I	Expert Group 36X Max		June 1992	July 2001	VOA Lab	used
MSD	MSVOA-F	Hewlett Packard 5971 Series	3118A02237	May 1999	July 2001	VOA Lab	used
GC	MSVOA-F	Hewlett Packard 5890	3108A34429	May 1999	July 200i	VOA Lab	used
Concentrator	MSVOA-F	TEKMAR LCS 2000	92056013	July 2001	July 2001	VOA Lab	recondition
Auto Sampler	MSVOA-F	TEKMAR ALS 2016	93194013	July 2001	July 2001	VOA Lab	recondition
Computer	MSVOA-F	MINTA ACER 32X	93007037	May 1999	July 2001	VOA Lab	used
MSD	MSVOA- H	Hewlett Packard 5970 Series	2206A01946	May 1999	July 2001	VOA Lab	used
GC	MSVOA- H	Hewlett Packard 5890	2750A17849	May 1999	July 2001	VOA Lab	used
Concentrator	MSVOA- H	OI Eclipse 4660	A401466023P	2004	Feb 2004	VOA Lab	used
Auto Sampler	MSVOA- H	OI Archon 5100	12225	May 1999	July 2001	VOA Lab	used
Computer	MSVOA- H	MINTA ACER 32X	93006275	May 1999	July 2001	VOA Lab	used
MSD	MSVOA- G	Hewlett Packard 5971A	2749A00075	May 1999	July 2001	VOA Lab	used
GC	MSVOA- G	Hewlett Packard 5890 Series II	3020A11012	May 1999	July 2001	VOA Lab	used
Concentrator	MSVOA- G	Ol Eclipse 4660	338466642P	2003	March 2003	VOA Lab	used
Auto Sampler	MSVOA- G	Ol Archon 5100	12971	May 1999	July 2001	VOA Lab	used
Computer	MSVOA- G	Expert Group		May 1999	July 2001	VOA Lab	used
MSD	MSVOA- J/K	Hewlett Packard 5971A Series	3235A45495	December 2002	Jan 2003	VOA Lab	New
GC	MSVOA- J/K	Hewlett Packard 5890	3324A04574	December 2002	Jan 2003	VOA Lab	New
P&T 1	MSVOA-J	OI Analytical 4560	N249460495	December 2002	Jan 2003	VOA Lab	New

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 34 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
P&T 2	MSVOA-	Ol Analytical 4560	N249460496	December 2002	Jan 2003	VOA Lab	New
Auto Sampler	MSVOA-J	OI Analytical 4552	13854	December 2002	Jan 2003	VOA Lab	New
Auto Sampler	MSVOA- K	OI Analytical 4552	13832	December 2002	Jan 2003	VOA Lab	New
Computer	MSVOA-J	Dell XPS D233	DLCY9	December 2002	Jan 2003	VOA Lab	New
MSD	MSVOA-L	Finnigan Thermo Trace DSQ	MS100167	2004	March 2004	VOA Lab	new
GC	MSVOA-L	Thermo Trace Ultra	20041827	2004	March 2004	VOA Lab	new
Concentrator	MSVOA-L	OI Eclipse 4660	A405466417P	2004	March 2004	VOA Lab	new
Auto Sampler	MSVOA-L	Ol Archon 5100	14126	2004	March 2004	VOA Lab	new
Computer	MSVOA-L	Dell XP		2004	March 2004	VOA Lab	new
Refrigerator	VOA-Ref-	Excellence	80700124	June 1992	July 2001	VOA Lab	New
Refrigerator	VOA-Ref- 2	Welbilt	9860305517	June 1998	July 2001	VOA Lab	New
Refrigerator	VOA- Ref-3	True Refrigerator		Jan 2002	Jan 2002	VOA Lab	used
Refrigerator	VOA-Ref-	National 14572	72S19207-F87	May 1999	July 2001	VOA Lab	used
Refrigerator	VOA-Ref-	Curtis Ward	03F0692	June 1992	July 2001	VOA Lab	used
Refrigerator	VOA- Methanol	Gibson	1270710366	May 1999	July 2001	VOA Lab	used
Oven	VOA-I	Fisher Scientific 230F	2876	May 1999	July 2001	VOA Lab	used
GC	GC-VOA- 1-A	Perkin Elmer PID	61N4101940	May 1999	July 2001	GC Lab	used
Hall Detector	GC-VOA-	Perkin Elmer 1000 Hall	920071	May 1999	July 2001	GC Lab	used
Concentrator	GC-VOA- 1-A	TEKMAR LCS 2000	90029018	May 1999	July 2001	GC Lab	used
Auto Sampler	GC-VOA-	Hewlett Packard Purge & Trap	3448A20160	May 1999	July 2001	GC Lab	used
Computer	GC-VOA- 1-A	MINTA	93001817	May 1999	July 2001	GC Lab	used
GC	GC-VOA- 2-B	Hewlett Packard 5890 Series II PID	3235A46097	May 1999	July 2001	GC Lab	used

**Document Control** 

Revision Date: November 13, 2005

# **Quality Assurance Manual** Revision #: 2001-14

Page 35 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
Concentrator	GC-VOA- 2-B	TEKMAR LCS 2000	91233006	May 1999	July 2001	GC Lab	used
Auto Sampler	GC-VOA- 2-B	Hewlett Packard Purge & Trap	3449A20164	May 1999	July 2001	GC Lab	used
Computer	GC-VOA- 2-B	MINTA	93001817	May 1999	July 2001	GC Lab	used
GC	GC-VOA- 3-C	Dimension PID/FID	921105	May 1999	July 2001	GC Lab	used
Concentrator	GC-VOA- 3-C	TEKMAR LCS 2000	93257007	May 1999	July 2001	GC Lab	used
Auto Sampler	GC-VOA- 3-C	TEKMAR 2016	94067022	May 1999	July 2001	GC Lab	used
Computer	GC-VOA- 3-C	MINTA	93001817	May 1999	July 2001	GC Lab	used
		<u>Metals</u>	<u>Lab</u>	•			
ICAP	ICP-1	Thermo Jarrell Ash (ICAP 61E Trace Analyzer	346 <del>3</del> 90	June 1994	July 2001	Metals Lab	New
Power Unit	ICP-1	Thermo Jarrell Ash Power Unit	2579	June 1994	July 2001	Metals Lab	New
Circulator	ICP-1	Thermo Jarrell Ash (Water Circulator)	J95048013	June 1994	July 2001	Metals Lab	New
Computer	ICP-1	Expert Group	8011894	June 1994	July 2001	Metals Lab	New
ICAP	ICP-2	Thermo Jarrell Ash (ICAP 61E Trace Analyzer	357490	May 1999	July 2001	Metals Lab	used
Power Unit	ICP-2	Thermo Jarrell Ash Power Unit	2653	May 1999	July 2001	Metals Lab	used
Circulator	ICP-2	Thermo Jarrell Ash (Water Circulator)	J95048013	May 1999	July 2001	Metals Lab	used
Computer	ICP-2	Expert Group		May 1999	July 2001	Metals Lab	used
ICAP	ICP-3	Thermo Jarrell Ash (ICAP 61E Trace Analyzer	249490	May 1999	July 2001	Metals Lab	used
Power Unit	ICP-3	Thermo Jarrell Ash Power Unit	2244	May 1999	July 2001	Metals Lab	used
Circulator	ICP-3	Thermo Jarrell Ash (Water Circulator)	20205	May 1999	July 2001	Metals Lab	used
Computer	ICP-3	Expert Group	8011861	May 1999	July 2001	Metals Lab	used
ICP MS	ICPMS 1	Thermo Elemental Analyzer	56	Dec 2003	Feb 2004	Metals Lab	New
Auto Sampler	ICPMS-1	ASX-510 Autosampler	120308ASX	Dec 2003	Feb 2004	Metals Lab	new
Circulator	ICP MS 1	Thermo Neslab (Water Circulator)	103240043	Dec 2003	Feb 2004	Metals Lab	New
Computer	ICP MS 1	Dell XP	1 DCV V0J	Dec 2003	Feb 2004	Metals Lab	New

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 36 of 71

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Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
AA Spectrophotometer	GFAA-1	Perkin Elmer Mod 5100	136018	May 2002	May 2002	Metals Lab	new
Furnace	GFAA-I	Perkin Elmer Zeeman 5100 Furnace AA	6590	May 2002	May 2002	Metals Lab	new
Power Unit	GFAA-1	Perkin Elmer HGA 600	5008	May 2002	May 2002	Metals Lab	new
Mercury Analyzer	HG-I	Leeman Labs PS 20011 Automated Mercury Analyzer	0006	Jan 2002	Jan 2002	Metals Lab	new
Computer	HG-1	Leeman Labs	6857	Jan 2002	Jan 2002	Metals Lab	new
Mercury Analyzer	HG-2	Leeman Labs Hydra AA Automated Mercury Analyzer	0006	June 2002	June 2002	Mictals Lab	new
Computer	HG-21	Dell	CJ85K11	June 2002	June 2002	Metals Lab	new
Hot Plate	HP-I	Valad Electric Co. 24 X 36	1920	Jan 2002	Jan 2002	Metals Digestion Lab	new
Block Digestor	BD-1	Environmental Express Hot Block	615CEC0814	Jan 2002	Jan 2002	Metals Digestion Lab	new
Block Digestor	BD-2	Westco Easy Digest	1279	2003	2003	Metals	new
Oven	0-1	Lab-Line Model 3512	0700-0078	May 1999	July 2001	Metals Digestion Lab	used
Water Bath	WB-3	National Model 230	1SW-7	2003	2003	Metals Digestion Lab	new
Scale	SC-1	OHAUS Model TP2KS	1570	May 1999	July 2001	Metals Digestion Lab	used
Scale	MDSC-2	Mettler PJ 400	G62435	May 1999	July 2001	Metals Digestion Lab	used
		General Chemistry	Lab				
Ion Chromatograph	IC-1	Metrohm 761 Compact Ion Chromatograph	17610020/09119	June 2002	June 2002	General Chemistry Lab	New
Sample Processor	IC-1	Metrohm 766	62041430	June 2002	June 2002	General Chemistry Lab	New
Computer	IC-1	Micron	13186350008	June 2002	June 2002	General Chemistry Lab	New

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 37 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
Scale	SC-3	Mettler PJ 400	J39330	May 1999	July 2001	General Chemistry Lab	used
Konelab	Konelab	Konelab	P4719011	Dec 2002	Jan 2003	General Chemistry Lab	new
Computer	Konelab	Dell	2000-256036	Dec 2002	Jan 2003	General Chemistry Lab	new
Refrigerator	WC-Ref-1	White-Westinghouse	BA93101741	May 1999	July 2001	General Chemistry Lab	used
COD	COD-1	Hach DR/2010 Spectrophotometer	971100006417	May 1999	July 2001	General Chemistry Lab	used
IR	IR-1	Perkin Elmer 1310 Infrared Spectrophotometer	135039	May 1999	July 2001	General Chemistry Lab	used
GBC	GBC	GBC UV Spectrophotometer Cvanide	1409	May 1999	July 2001	General Chemistry Lab	used
GBC	GBC	Monitek- TA1/Nephelometer	T04136701H7E	May 1999	July 2001	General Chemistry Lab	used
GBC	GBC	Orion Ion Analyzer EA940	SR32A	Мау 1999	July 2001	General Chemistry Lab	used
Scale .	SC-4	Ohaus GT410	02008	May 1999	July 2001	General Chemistry Lab	used
Conductance Meter	Conductanc e Meter	YSI Model 35 Conductance Meter	K8002530	May 1999	July 2001	General Chemistry Lab	used
Hot Plate	WC-HP-1	PMC Hot Plate/Stirret 9 Position Model 529P	981990758506	May 1999	July 2001	General Chemistry Lab	used
Hot Plate	WC-HP-2	PMC Hot Plate/Stirrer 9 Position Model 529P	981990758504	May 1999	July 2001	General Chemistry Lab	used
Hot Plate	WC-HP-3	PMC Hot Plate/Stirrer 9 Position Model 529P	981990758507	May 1999	July 2001	General Chemistry Lab	used
Hot Plate	WC-HP-4	PMC Hot Plate/Stirrer 9 Position Model 529P	981990655236	May 1999	July 200 i	General Chemistry Lab	used
Muffle Furnace	Muffle Furnace	Blue M Model M15A-2A	7419	May 1999	July 2001	General Chemistry Lab	uşed
Oven	WC-2	Fisher Model 516G	803N0088	May 1999	July 2001	General Chemistry Lab	used

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 38 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
S-Evaporator	Evaporator	Organomation Analytical Evaporator	10688	May 1999	July 2001	General Chemistry Lab	used
TKN Heater	TKN Heater	Labconco TKN Heater (6 position)	183300	May 1999	July 2001	General Chemistry Lab	used
Midi Cyanide	Midi Cyanide	Andrews Glass (Cyanide Distillation)	ABX0409	May 1999	July 2001	General Chemistry Lab	used
Scale	SC-5	Mettler AE200	J39333	May 1999	July 2001	General Chemistry Lab	used
тос	тос	Tekmar Appolo 9000	US03227003	Aug 2003	Aug 2003	General Chemistry Lab	DCW
Auto-Titrator	Titrator	Titroline Alpha	441912	March 2004	March 2004	General Chemistry Lab	new
Auto-Titrator Sampler	Titrator	TW Alpha 16 Sample Changer	00472248	March 2004	March 2004	General Chemistry Lab	new
Digestor	Digestion	Westco Easy Digest 40/20	1102	March 2003	March 2003	General Chemistry Lab	new
Ignitability instrument	IGN-1	Koehlex closed cup (Penske substitute)	R61091858	March 2004	April 2004	General Chemistry Lab	new
Oven	WC-1	Lab-Line (Model 3512)	0789-0078	May 1999	July 2001	General Chemistry Lab	used
		Microbiology	Lab				-
Autoclave	Autoclave	Tuttmauer Autoclave Model 2540M	9603296	May 1999	July 2001	Microbiolo gy Lab	used
Incubator Bath	Incubator-	Precision Coliform Incubator Bath	10AY-11	May 1999	July 2001	Microbiolo gy Lab	used
Refrigerator	Micro-Ref-	Goldstar (GR-142BP)	20019795	May 1999	July 2001	Microbiolo gy Lab	used
Colony Counter		Darkfield Quebec Colony Counter	3325	· May 1999	July 2001	Microbiolo gy Lab	used
Incubator	Incubator-	VWR 1540 Incubator	0102290	May 1999	July 2001	Microbiolo gy Lab	used
Incubator	Incubator-	Shel-Lab 1545 Incubator	1100691	May 1999	July 2001	Microbiolo gy Lab	used
Refrigerator	Micro-Ref-	Sanyo	911246533	May 1999	July 2001	Microbiolo gy Lab	used
Incubator	Incubator-	Forma-Scientific Model 3918 Incubator	60147-89	May 1999	July 2001	Microbiolo gy Lab	used
Dissolved Oxygen meter	DO Meter	YSI 5000 Dissolved Oxygen Meter	98C0951AB	May 1999	July 2001	Microbiolo gy Lab	used

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 39 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)		
	Sample Management								
Refrigerator	SMVOA-2	Gibson	LA23205322	May 1999	July 2001	Sample Manageme nt	used		
Refrigerator	SM-3	Howard WC-45 (Glass Double Door)	84236156	Маў 1999	July 2001	Sample Manageme nt	used		
Walk in Refrigerator	SM-1	Bally (10° X 38°)	***************	May 1999	July 2001	Sample Manageme nt	used		
Scale	SMB-3	Sartorius Model 1.320	36050083	May 1999	July 2001	Sample Manageme nt	used		
Temperature Gun	Temperature Gun	Wahl Model DHS-100X	2459	May 1999	July 2001	Sample Manageme nt	used		
Freezer		Sears/Kenmore (Ice Packs)	544123998	May 1999	July 2001	Sample Manageme ut	used		
		Extractions	Lab						
Scale	EX-SC-1	Mettler PM 4600	975690	May 1999	July 2001	Extraction s Lab	used		
Refrigerator	#3	Gibson	LA23601205	May 1999	July 2001	Extraction s Lab	used		
Sonicator	#1	TEKMAR Sonicator		May 1999	July 2001	Extraction s Lab	used		
Sonicator	#2	TEKMAR Sonicator		May 1999	July 2001	Extraction s Lab	used		
Sonicator	#3	TEKMAR Sonicator		May 1999	July 2001	Extraction s Lab	used		
Sonicator	#4	TEKMAR Sonicator	•••••	May 1999	July 2001	Extraction s Lab	used		
Sonicator	#5	Heat Systems-Ultrasonics Inc (W-380)	<del></del>	May 1999	July 2001	Extraction s Lab	used		
Sonicator	#6	Heat Systems-Ultrasonics Inc (W-380)		May 1999	July 2001	Extraction s Lab	used		
N-EVAP	N-EVAP	Organomation Nitrogen Evaporation System		May 1999	July 2001	Extraction s Lab	used		
Water Bath	EX-WB-1	Boekel		May 1999	July 2001	Extraction s Lab	used		
Water Bath	EX-WB-2	Boekel		May 1999	July 2001	s Lab	used		
Water Bath	EX-WB-3	Boekel	*******	May 1999	July 2001	Extraction s Lab	used		
Water Bath	EX-WB-4	Boekel		May 1999	July 2001	Extraction s Lab	used		
GPC	GPC-1	OI Analytical AP 500	9612AP/500	2000	July 2001	Extraction s Lab	used		
GPC	GPC-2	Accuprep JZ Scientific	03B-1060-3.0	2003	March 2003	Extraction s Lab	used		
Auto Soxhlet	Auto Soxhlet-1	Soxtherm/Multistat	4031743	Feb 2004	March 2004	Extraction s Lab	New		

**Document Control** 

Revision Date: November 13, 2005

# Quality Assurance Manual Revision #: 2001-14

Page 40 of 71

Instrument	Lab Id	Manufacturer Description	Serial Number	Year Purchased	Date place in service at this location	Current Location	Condition Received (used, new, recondition)
Auto Soxhlet	Auto Soxblet-1	Soxtherm/Multistat	0431744	Feb 2004	March 2004	Extraction s Lab	new
Oven	Oven	VWR 13054	01002393	May 1999	July 2001	Extraction s Lab	used
Heater	Heater-1	Lab line Extraction Heater 6 position		May 1999	July 2001	Extraction s Lab	used
Heater	Heater-2	Lab line Extraction Heater 6 position		May 1999	July 2001	Extraction s Lab	used
ASE	ASE-1	Dionex Accelerated Extraction	03010456	March 2003	October 2003	Extraction s Lab	new
ASE	ASE-2	Dionex Accelerated Extraction	03060034	March 2003	October 2003	Extraction s Lab	new
ASE	ASE-3	Dionex Accelerated  Extraction	03060032	March 2003	October 2003	Extraction s Lab	new
Ultrasonic Bath	Sonicator Bath	Bransonic Ultrasonic Cleaner 8510	RPA020497187 E	March 2004	March 2004	Extraction s Lab	new
		GC MS VOA AIR					
MSD	MSVOA- M	Hewlett Packard 5970Series	2807A11014	June 1994	July 2001	VOA Lab	used
GC	MSVOA-I	Hewlett Packard 5890	2429A02327	June 1994	July 2001	VOA Lab	used
Concentrator	MSVOA- M	Entech 7100A	69327	September 2004	Dec 2004	VOA Lab	Bew
Auto Sampler	MSVOA- M	Entech 7500	. 13990	September 2004	Dec 2004	VOA Lab	used
Computer	MSVOA- M	Dell		September 2004	Dec 2004	VOA Lab	used

#### 14. DOCUMENT CONTROL

Objective: To establish a system in order to have all information related to the production of analytical data controlled, protected, and stored to ensure its integrity and traceability. The system must ensure that only most recent version of required documentation is used by the appropriate personnel in the laboratory. All internal regulatory documents including the QA manual, SOP's, software, and equipment user's manuals are subject to document control.

Quality Assurance Manual: The QA Manual outlines how Chemtech plans, implements, and assesses the effectiveness of QA/QC control actions in the functioning of its analytical services.

Standard Operating Procedures (SOP's): An SOP is a written document which details the method of an operating, analysis or action whose techniques and procedures are thoroughly prescribed and which is accepted as the method for performing certain routine or repetitive task. SOP's are an integral part of consistent quality laboratory work.

- 14.1 DOCUMENT OVERSIGHT: The QA/QC Director is responsible for the document control system and maintains a current list of controlled documents, their location, and revision number. The QA/QC Director and Technical Director approve all newly released operating procedures and any revision to controlled documents.
- 14.2 DISTRIBUTION OF CONTROLLED DOCUMENTS: Controlled documents are signed by QA/QC Director and Technical Director. Copies of documents not signed or assigned a control number are considered uncontrolled documents. All departments supervisor receive a copy of the updated document control of the QA Manual, SOP's, and any other related documents. With the document, the supervisor receives a distribution document log that is signed and returned to the QA Office to be filed in a binder. This distribution log has the name of the document the printed name of the person receiving it, the signature and date of distribution.

A copy of current applicable SOP (analytical, administrative, and or procedural) and QA Manual is kept in each department. The original document of each outdated SOP or QA manual is retained in the QA/QC office.

14.3 DOCUMENTS REVISIONS: All laboratory documents under document control are reviewed annually and revised as appropriate. A request to change a document is detailed on a "Document Change/Revision Form."

For further details refer to the SOP for writing SOP's. The Technical Director and QA/QC Director review the requested change. The QA/QC Director is responsible for updating the appropriate document and Document Control List once a change has been approved.

- 14.4 STANDARD OPERATING PROCEDURES (SOP's): Three (3) types of SOP's are used at Chemtech.
  - 14.4.1 Analytical SOP: Provides stepwise instructions to an analyst on how to perform a particular analysis.
  - 14.4.2 Administrative SOP: Details the process of documentation of all administrative activities.
  - 14.4.3 Procedural SOP: Provides instructions and information for support activities in the laboratory.

Each SOP developed is assigned a unique document control number. SOP's are reviewed annually and updated if necessary. SOP's can be edited more frequently if systematic errors dictate a need for process change or the originating regulatory agency promulgates a new revision of the method.

SOP's are maintained in electronic read only format on Chemtech LIMS network server. All original hard copies are kept in the QA/QC office in official SOP file.

14.5 LOGBOOK CONTROL: Laboratory logbooks maintained at Chemtech are preprinted, numbered and include a title which identifies the purpose of the logbook. Each logbook indicates the instrument name, manufacturer, model number and a Chemtech identification number. The logbooks also include calibration and maintenance schedules. Extraction department activities are recorded in preparation logbooks. All quality control activities are recorded in the logbooks.

Active logbooks are maintained in the laboratory and retired logbooks are maintained in the QA/QC office. Laboratory staff may keep two recent sequentially dated logbooks of the same type in order to simplify review of recently conducted analysis. For further details refer to the "Logbook Protocol" SOP.

14.6 ANALYTICAL DOCUMENT MAINTENANCE AND STORAGE: Analytical data logbooks and clients reports are retained for five years unless specified otherwise. After five years, the analytical data and reports are systematically destroyed.

Projects completed in the current year are maintained in the Report Production area. All other analytical data, reports, and logbooks are kept in the Document Storage Area. The electronically scanned data are archived on LIMS Server. Access to Document Storage Area and the LIMS Server is limited by levels of authorization.

In the event of an ownership change all appropriate regulatory agencies will be notified. As a condition of the ownership change the buyer will be requested to maintain all records and reports prior to the time of legal transfer.

In the event of a bankruptcy all appropriate regulatory agencies and clients will be notified. They will be given the opportunity to retrieve their records and reports within 30 days of notification. The records and reports will be destroyed after the 30 days notification period has expired.

14.7 PERSONNEL RECORDS: The QA/QC office maintains personnel folders for all analytical staff members. These folders document that analysts have received instructions for their job related activities including read receipts for SOP's and the QA Manual. Personnel records also include health and safety training received and a signed ethics agreement, in addition to technical training records, demonstration of capability, and precision and accuracy for the tests.

#### 15. TRACEABILITY OF MEASUREMENTS

Objective: To establish procedures for achieving traceability of measurements between a measured value and a national reference standard.

15.1 METRIC MEASUREMENTS — THERMOMETER AND BALANCE CALIBRATION: Verification and/or validation of balances and thermometers are performed with National Institute of Standards and Technology (NIST) traceable standards. All new thermometers used in the laboratory are calibrated prior to their use and all thermometers are calibrated annually. A tag attached to the calibrated thermometer documents the date it was calibrated and any correction factor if necessary. The calibration readings are recorded in a logbook. Test equipment used in the laboratory requiring temperature control is assigned a separate calibrated thermometer. The temperature is recorded daily in a temperature log for all required equipment. For further details refer to the "Thermometer Calibration SOP."

Class S Calibration weights are used to calibrate all the balances used in the laboratory. Calibration checks are performed on a daily basis and recorded in a logbook. An annual balance calibration is conducted by a certified agency or organization. Calibration certificates include the location of the equipment, model, serial number, manufacturer and sensitivity information. This information is maintained in the QA/QC office.

15.2 CHEMICAL STANDARDS: All reference and working standards used for calibration must be NIST traceable and have a traceability certificate. Vendors provide a traceability certificate for all chemical standards, which include a lot number and expiration date. Working standards are prepared from the vendor traceable standards and are documented in the "Standard Preparation Logbook" and include the vendor lot number, dates of preparation, and preparer's initials and date. The certificates of traceability are affixed to the logbook to keep a permanent record. The vials, in which working standards are kept, are labeled with the lot number, preparation date, and expiration date.

Revision #: 2001-14

Page 45 of 71

#### 16. CALIBRATION AND VERIFICATION OF TEST PROCEDURES

Objective: To ensure that instrumentation is performing to predetermined operational standard prior to the analysis of any samples and that the data are of known quality and appropriate for a given regulatory agency requirements must be established by the laboratory.

#### 16.1 ORGANIC TEST PROCEDURES

Tuning Criteria for GC/MS Instruments: Each GC/MS system must pass the performance criteria for 4-Bromofluorobenzene (BFB) or Decafluortriphenylphosphine (DFTPP) before any samples, standards or blanks can be analyzed. The tuning standard must meet the criteria specified in each analytical SOP. The chromatogram should not contain any baseline drift and the peaks should be symmetrical. Each GC/MS system must be tuned every 12 hours for SW846 methods, OLM04.2 and 24 hours for 600 series methods.

Initial Calibration: Second source standards are obtained from a different manufacturer than the original standards, unless one is not available and are used to verify the initial calibration. An initial calibration is run on all instruments. Initial calibration is rerun when continuing calibration criteria cannot be met. The criterion for an initial calibration curve consists of a minimum of five points for SW846 Methods and OLM04.2 and a minimum of three points for 600 series methods. The lowest standard analyzed must be equal to or less than the reporting limit. The response factor (RF) must be calculated for all compounds. The Relative Standard Deviation (RSD) is used to determine linearity. See individual SOPs for limits, criteria and allowances. The system performance check compounds (SPCC) are checked for a minimum average response factor. These compounds must meet the minimum response factors specified in each analytical SOP. If the minimum average response factor for any SPCC does not meet the criteria then corrective action is required and the GC/MS system recalibrated. The initial calibration verification must be successfully completed prior to running any samples.

Continuing Calibration Verification (CCV): The initial calibration curve for each compound of interest is checked and verified once every 12 hours for SW846 methods and OLMO4.2, and once every 24 hours for 600 series methods. This is accomplished by analyzing a midpoint calibration standard and verifying all continuing calibration criteria for a given method are met. Sample, blank, and QC standards cannot be

Quality Assurance Manual Revision #: 2001-14

Page 46 of 71

analyzed unless a CCV meets method criteria. For further details refer to the individual SOP's.

#### Formulas:

RF = Area of compound x Concentration of ISTD

Area of ISTD x Concentration of compound

 $\% RSD = \frac{SD}{RF} \times 100$ 

where SD is the standard deviation for all compounds and RF is the average response factor

When the %RSD exceeds criteria for any analyte, a linear regression of the instrument response versus the concentration of the standards is performed. The regression will produce the slope and intercept terms for a linear equation in the form

y = ax + b,

#### where:

y = instrument response (peak area or height)

a = slope of the line(also called the coefficient of x)

x = concentration of the calibration standard

b = intercept

- The use of linear regression may not be used as a rationale for reporting results below the calibration range demonstrated by the analysis of the standards.
- The regression calculation will generate a correlation coefficient(r).

In order to be used for quantitative purposes, the correlation coefficient must be greater or equal to 0.99

#### 16.2 INORGANIC TEST PROCEDURES

Balance Calibration: All balances are calibrated each day with 3 class "S" weights covering the expected range of analysis and recorded in the balance calibration logbook. Each balance is certified for accuracy once a year by an outside contractor. A calibration sticker is placed on the balance and all associated information is maintained in the QA/QC department.

Titrant Standardization: All titrants used in the laboratory are standardized when opened to verify the titrant's normality in duplicate. These values are recorded in the appropriate analytical logbook. Each

titrant must be within 90-110% of the known value. If not, the titrant is restandardized.

Instrument Calibration: An initial calibration is run on all instruments.

Mercury analyzer must be calibrated using a blank and 5 standards in graduated amounts that define the linear range of analysis. The correlation coefficient for the curve must be > 0.995.

Spectrophotometric analyses are calibrated by using a blank and minimum 5 standards. The correlation coefficient must be > 0.995, or as defined in the analytical SOP

If any calibration curve has a correlation coefficient < 0.995, corrective action is taken and a new calibration curve is analyzed. Samples, blanks, and standards are not analyzed until the curve passes the criteria. For all calibrations the lowest standard analyzed must be equal to or less than the reporting limit.

#### Formula:

 $y = ax \pm b$ ,

where:

y = instrument response (peak area or height)

a = slope of the line(also called the coefficient of x)

x = concentration of the calibration standard

b = intercept

Initial Calibration Verification (ICV): Second source standards are obtained from a different manufacturer than the original standards, unless one is not available and are used to verify the initial calibration. The ICV must be performed immediately after calibration of each metal and spectrophotometric analysis. This is accomplished by analyzing a midpoint calibration standard. The ICV must have a percent recovery between 90-110% from the initial calibration curve. If the criterion is not met, corrective action must be taken. If the source of the problem can be determined after corrective action has been taken, a new calibration MUST be generated. Samples, blank, and QC standards cannot be analyzed unless the ICV meets method criteria. The initial calibration shall be verified and documented for every analyte at each wavelength used for analysis.

Continuing Calibration Verification (CCV): CCV analysis is performed every 10 samples for all FLAA and spectrophotometric analyses. The

CCV must be analyzed at the beginning of the run and after the last analytical sample. The CCV concentration is at or near the midpoint of the calibration curve and is analyzed at every wavelength used for the analysis of each analyte. The CCV results must fall within the control limits of 85-115% of the true value or the control limits specified in each analytical SOP.

Thermometer Calibration: Every thermometer used in the laboratory is certified annually against a NIST certified thermometer, which is traceable to the manufacturer. All data is recorded in a logbook.

pH meter Calibration: Each pH meter is calibrated daily at pH of 4 and 7 and then checked with a pH 10 buffer solution. The calibration is recorded in the pH logbook along with the date and time of calibration. The calibration is checked every 3 hours during use and any adjustments are made.

Spectrophotometer Wavelength Check: A wavelength check of each spectrophotometer is performed annually against Platinum/Cobalt standards and recorded in the maintenance logbook. If the wavelength does not meet the manufacturer's specified conditions, service is performed on the instruments.

Autoclave test strip: A temperature sensitive tape is used to verify the content of each autoclave run is processed.

Linear range Verification & Calibration for ICP - Metals: Linear range verification is performed for all ICP instruments. A series of calibration standards are analyzed over a broad range of concentration and data from these analyses are used to determine the valid analytical range for the instrument. ICP instrument calibration is routinely performed using a single standard at a concentration within the linear range and a blank.

Calibration and Verification of Equipment Revision Date: November 13, 2005 **Quality Assurance Manual** 

Revision #: 2001-14 Page 49 of 71

# 17. CALIBRATION, VERIFICATION, AND MAINTENANCE OF EQUIPMENT

Objective: To establish a system to ensure accurate calibration and maintenance of all laboratory equipment. All instrument maintenance activities must be recorded in the instrument logbooks. Instrument should be labeled as a dedicated piece of equipment when an instrument is used for a unique activity.

17.1 Instrument Calibration: Instruments are calibrated according to the requirements set forth in the by the manufacturer or as dictated by the respective SOP's for the test method for which the instruments are used. The frequency and type of maintenance and calibration activity performed must be documented in the instrument logbook. If an instrument is out of working order, out of calibration or in need of repair, a tag is affixed to the instrument directing the analysts to use another instrument.

Support instruments are calibrated and verified using NIST traceable reference standards over the range of use. Balances, ovens, incubators, water baths, freezers, and refrigerators are checked daily if in use and readings are recorded in their respective logbooks.

- 17.2 Instrument Maintenance: Some instruments are purchased with a service contract. If a service contract is purchased, it is recorded in the logbook along with a contact phone number. Calibration is necessary after instrument repair and prior to using any new instrument. Instrument servicing includes routine cleaning and the repair and/or replacement of any faulty parts. For further information refer to the instrument manual or the SOP for the test method the equipment is used.
- 17.3 CALIBRATION/MAINTENANCE LOG: Each instrument has an associated maintenance and calibration logbook. The interval maintenance/calibrations are guided by the manufacturer's instructions or as often as needed based on individual instrument performance. It may be modified by user's experience and frequency of use. The instrument is identified on the first page of the logbook. The logbook must document the calibration and maintenance of the instrument.

**Quality Assurance Manual** 

Revision #: 2001-14

Page 50 of 71

#### 18. VERIFICATION PRACTICES

Objective: To establish a process for the verification practices in effect to assure adherence to the Quality Assurance Plan. A system for proficiency testing, use of reference materials, and internal QC schemes must be in place in order to ensure compliance.

### 18.1 Proficiency Testing (PT) Programs:

External PT Samples: Chemtech participates in NYSDOH Potable, Non Potable and Solid/Hazardous Categories and USEPA CLP. The results are used to evaluate the ability of the laboratory to produce accurate data. PT reports and raw data are retained in the laboratory. The laboratory participates in the PT from other providers as well, e.g., client specific PT samples and Environmental Resources Association (ERA).

Internal PT Samples: The QA/QC Director is responsible for administering an in-house blind check sample program. Quality control samples are obtained from the EPA and from a private supplier. The known samples are blindly introduced into the system as a typical sample and analyzed as such. The results are reported to the QA/QC Director and evaluated.

This process allows for close monitoring of the accuracy of laboratory analyses on blind samples. If a problem is discovered, the QA/QC Director brings it to the attention of the Company President and Laboratory and Department Manager. With the assistance of the Technical Director, the cause of the problem is determined and appropriate corrective action is taken. Another blind sample is sent through the laboratory to confirm the problem has been resolved.

- 18.2 USE OF REFERENCE MATERIAL: The laboratory purchases external reference samples from known vendors. All reference samples are certified and the laboratory maintains the manufacturer's Certificate of Analysis on file.
- 18.3 INTERNAL QUALITY CONTROL PROCEDURES: The data acquired from QC procedures are used to judge the analytical quality of the data, to determine the need for a corrective action, and to interpret results after the implementation of corrective actions. Each test method SOP details the QC procedures to be followed.

Method Blank: A method blank is an aliquot of reagent water for aqueous samples and an aliquot of a solid matrix carried through the entire sample

preparation and analytical procedure. A method blank must not contain any target analyte(s) at concentrations that exceed method requirements. If it does, the source of contamination must be removed or minimized before proceeding with sample analysis.

Laboratory Control Samples (LCS): A LCS is an aliquot of reagent water for aqueous samples and aliquot of a solid matrix spiked with the target analyte list analyzed with each batch of samples to demonstrate the method accuracy within acceptance QC limits. The results are used to determine batch acceptance. Each method SOP includes detailed QC procedures and QC limits.

Sample Duplicates: Sample duplicates are performed to measure analytical precision. One duplicate sample must be analyzed from each group of samples of similar matrix type for each batch of 20 samples. If a duplicate result falls outside QC limits the original sample and the duplicate sample data are regarded as unreliable and may necessitate corrective action.

Matrix Spikes: Matrix spikes are analyzed at a frequency of one per twenty samples to measure analytical precision and accuracy of the specified matrix. If precision and accuracy are out of QC limits, corrective action is required.

Surrogate Spikes: Surrogates are organic compounds that are similar in behavior to the target analytes but are not found in nature. They are added to all blanks, samples, and standards except the tuning standards at a concentration specified in relevant SOP's. All surrogates must meet the recovery limits specified in each SOP. If any surrogate does not meet the limits, the sample must be reanalyzed.

Internal Standard: An internal standard (IS) is a known amount of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method. Retention time (RT) for an IS is also compared to reference standards to assure that target analytes can be located by their individual relative RT. If the criteria for IS response or RT criteria are not achieved corrective action is required, e.g., recalibration and reanalysis.

Sample Analysis: The analyst is responsible for performing all QC requirements before and after analyzing the sample to make sure that required QC criteria are met. If the sample QC criteria are not met, the analyst must take corrective action to rectify any problems. If the analyst

is not able to remediate the issue, then must notify the supervisor who will take necessary corrective action.

Data Package Review: Data review is performed at four different levels to assure that all QC criteria are met. The analyst conducting the analysis performs first data review. Another analyst conducts a peer review and then the data is submitted for supervisory review. The final review of the data is conducted in the QC department before the data are released to the client. A spot check review of the completed data packages is conducted by the QA/QC Director. For further details refer to "Procedures for Audits and Data Review" section of this QA Manual and "Data Review/Validation" SOP.

Monitoring Quality Control Limits: Quality Control data generated from duplicate analysis and matrix spikes/matrix spike duplicates are monitored and plotted on Quality Control Charts. Chemtech utilizes the Quality Control charts to identify data trends and assure that all tests are within control.

Chemtech records the theoretical or true value, then calculates and plots the mean value. In general, our warning limits are ±2 Standard Deviations from the true value. Corrective action is taken when ±3 Standard Deviations from the mean value are encountered. The Percent Recovery for all quality control samples must be within the limits stated in the method.

In addition to control chart limits, the laboratory uses limits of 75-125% and RPD limits of  $\pm 20\%$  for inorganic analysis. For organic analysis %R limits and RPD limits as stated in applicable methods are used.

In control charts application, any points beyond the control limits indicate an out of control situation. When an out-of-control situation occurs, analyses must be stopped immediately until the problem has been identified and resolved. The control charts are also utilized to identify trends, which can be checked and resolved before the system goes out-of-control.

Annual Quality Audits: An annual quality review of the system is important to ensure that laboratory management can continue to be confident that all measures are being taken to produce the highest quality of data and services. Annual audits, along with day-to-day data review, provide effective means for ensuring that QC activities are being implemented and that each analyst performs in a manner consistent with the quality system. The QA/QC Director conducts the audits, which are

Verification Practices

Revision Date: November 13, 2005

**Quality Assurance Manual** 

Revision #: 2001-14

Page 53 of 71

scheduled and announced in advance. For further details refer to the "Data Review and Internal Quality Audits" section of this manual.

# 19. LABORATORY MANAGEMENT POLICY FOR PERMITTED DEPARTURES FROM DOCUMENTED POLICIES AND PROCEDURES

Objective: To establish a process for an event which requires departure from the documented policies and procedures.

19.1 PROCEDURE: The Technical Director, Laboratory Manager, and QA/QC Director have the responsibility for ensuring that the laboratory's policies are adhered to by all personnel. A departure from documented policies is allowed if fully documented and approved by the appropriate level of authority. Documentation of the departure includes the reason for the departure, the effected SOP(s), intended results of the departure and the actual results.

If the departure affects data, the client is notified before conducting the analysis for approval. This departure is also noted in the case narrative of the final report.

If the Client requests a method modification that represents a significant departure from a reference method, the client must acknowledge in writing the authorization of the modification. The acknowledgment can be in the form of a contract modification or signing the quotation acceptance page.

The quotation details the analytical requirements including the test methods for the project, the acceptance page to be signed by the client, states that "the quotation accurately describes the analytical requirements".

Revision Date: November 13, 2005

**Quality Assurance Manual** 

Revision #: 2001-14

Page 55 of 71

#### CORRECTIVE ACTIONS FOR TESTING DISCREPANCIES 20.

Objective: To establish a system for actions taken in response to nonconformance reports issued during performance, data review, or a client complaint. The goal of the corrective action program is to correct and monitor out-of-control events, which effect the integrity of analytical results. conditions that adversely impact data quality must be identified and corrected.

OUT-OF-CONTROL EVENTS: Out-of-control situations are identified through analytical data validation procedures. An out-of-control event is a situation, which results in the development of unacceptable results. Once a problem has been identified, the QC Officer must contact the department supervisor using the Corrective Action (CA) report form. The supervisor must initiate investigation into cause, and must ensure that corrective action is implemented and is effective. The CA must be documented on the (CA) report form and filed in QA/QC office. Refer to Corrective Action SOP for details of the corrective action report forms.

There are many situations that present an out-of-control situation. Contamination, percent recoveries and duplicate variations that are not within control limits, and failing calibrations are examples of situations considered out-of-control. Whenever a situation of this nature is encountered. Chemtech diligently develops the appropriate corrective action.

- CORRECTIVE ACTION PROCESS: A corrective action is a response to an 20.2 out-of-control event, which brings back a system to produce acceptable results. Corrective actions taken to control an event can be: stop analytical work immediately; identify the symptom of the out-of-control event; identify the cause of the out-of-control event; implement a corrective action; confirm that a return to control has been achieved by analyzing reference samples; document entire process by completing a CA Report Form; complete and return the CA Report Form to the QA/QC office.
- DEPARTURES FROM DOCUMENTED POLICIES AND PROCEDURES: Method 20.3 SOP's provide QC acceptance criteria and specific protocols for corrective actions. When testing discrepancies are detected such as out-of-control QC, the analyst must follow the corrective action protocol as described in the applicable method SOP.

Any corrective action taken that is not mentioned in the SOP is first approved by Technical Director and QA/QC Director. This action is recorded in the CA Report Form and is documented in the electronic

database of corrective actions. If necessary, the method SOP is than revised to incorporate the corrective action to make it a part of SOP for future use.

20.4 CORRECTIVE ACTION MONITORING: Laboratory Manager, Department Managers and QA/QC Director routinely monitor corrective actions implemented in the laboratory for effectiveness and to ensure that the deficiency has been completely removed from the system. If the deficiency still exists after a given period of time, the corrective action is reevaluated and modified.

**Quality Assurance Manual** 

Revision #: 2001-14 Page 57 of 71

#### 21. REPORTING ANALYTICAL RESULTS

Objective: To ensure that the reported results are accurate, clear, objective, and unambiguous. The contents of the final report must include all necessary information and must be clear and understandable for the end-user.

21.1 REQUIRED DOCUMENTATION: All documentation used to approve and defend reported data must be collected and should be available and referenced so it can be found at any time it may be needed. Chemtech reports meet all applicable regulatory and client requirements. Electronic reports can be customized to meet the client specific requirements.

Documentation for Sample Identification: Includes at minimum sample identification, chain-of-custody, Field QC, if any and any other related documents.

Documentation of the Analytical Performance: Analytical method used and method detection limit (MDL, if required); Instrumentation (manufacturer, model, performance checks); Calibration data (initial and continuing); Detailed analytical work (raw data, runlogs, standard and reagent preparation, calculations)

QA/QC Documentation and Data: Analysis of blanks; Source of QC check standards; Preparation of spike stock solution.

Checks and Validation of Analytical Data: Peer review, Supervisory review, and QC review Checklists; Corrective actions (when applicable); Date and signature of approval of the reportable data of each parameter tested; Date and signature for approval of the final report.

21.2 SIGNIFICANT FIGURES IN ANALYTICAL REPORTS: Numerical data are often obtained with more digits than are justified by their accuracy and precision therefore must be reported by the accuracy of the analytical method.

The number of significant figures refers to the number of digits reported for the value of a measured or calculated quantity indicating the accuracy and precision of the value. Nonzero integers always count as significant figures. Leading zeros are zeros that precede all the zero digits and do not count as significant figures. The zeros simply indicate the position of the decimal point.

Captive zeros are zeros between nonzero digits, and always count as significant figures. Trailing zeros are zeros at the right end of the number and are significant only if the number contains a decimal point. At Chemtech the results are reported to two significant figures.

When rounding a number carry at least one digit beyond the last significant digit throughout all calculations. Round the final result by changing all digits beyond the last significant digit to zeros; drop these zeros if they are to the right of the decimal point.

21.3 Units Used to Express Analytical Results: Units used to express analytical results depend on the analytical method used, the concentration of the analytes, and the matrices of the sample analyzed.

The most common unit used to express results is milligrams per liter (mg/L), which is equal to parts per million (ppm) or milligrams per kilogram (mg/Kg). Other units used are microgram per liter (µg/L) which is equal to parts per billion (ppb) or micrograms per kilogram (µg/Kg).

21.4 REPORT CONTENTS: The final report includes the following information:

Client Information: name and address of the client

Project Information: Client project name and location (if specified by the client)

Chemtech Reference Information: Chemtech project number

Evidence Receipt: Description and identification of samples, chain-of-custody

Case narrative (if applicable): Description and/or identification of analysis performed with a description of deviations from the SOP if required

Summary and Results: Analytical results supported by raw data, chromatograms, initial calibration and continuous calibration, etc.

Report is sequentially numbered and all raw data and chromatograms are initialed and dated by the analyst. The final report is signed and dated by the QC supervisor.

#### USEPA - CLP

### 9-IN METHOD DETECTION LIMITS (ANNUALLY)

Lab Name CHEMTECH CONSULTING GROUP	Contract	
Lab Code: CHEM Case No.:	NRAS No.:	SDG No.:
Instrument Type: P	Instrument ID: P2	Date: 01/15/2006
Preparation Method: <u>HW1</u>		
Consumity This (will be malked ING/I		

Analyte	Waveleugth /Mass	CRQL.	MDL
Aluminum	308,20	200	11.8
Antimony	206.80	60	16.1
Arsenic	189.00	10	4.1
Barium	493.40	200	0.90
Beryllium	313.00	5	1.3
Cadmium	226.50	5	1.1
Calcium	317.90	5000	9.0
Chromium	267.70	10	1.8
Cobalt	228.60	50	2.1
Copper	324.70	25	1.5
Iròn	271.40	100	27.6
Lead	220.40	10	4.5
Magnestum	279.00	5900	21.7
Manganese	257.60	15	1.4
Mercury		0.2	
Nickel	231.60	40	4.2
Pomssium	-766.50	5000	42.8
Selenium	196.00	35	9.0
Silver	328.00	10	2.2
Sodium	330.20	5000	261
Thallium	190,90	25	9.6
Vanadium	292.40	50	1.5
Zinc	206.20	60	3.1
Cyanide		10	
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FORM IX-IN

### 21.5 DATA COLLECTION, REDUCTION, REPORTING AND VALIDATION PROCEDURE

#### Data collection:

All data is collected from the instrumentation electronically. This data is then transfer electronically to a data processing computer were the data is revised and verify for method adherence and compliance.

For some analysis the data can not be transfer electronically. The data is then enter manually to the reporting software and verify by a peer review.

#### Data reduction:

Analyst then process the data and saves all instrument collected data in a designated folder in Mars (data storage server). The data is then brought electronically into the data reporting system were the data is reviewed against the method requirements and QC limits.

#### Data reporting:

Once the data is approved the forms are printed. The data package is arranged with the necessary forms depending on the method and client specifications. Once the data package is complete the package is then brought to the Reporting Department for review and validation.

#### Data validation:

The first review is done in the lab by the analyst performing the analysis with the help of the reporting software (EISC), which contains all the method requirements.

The supervisor for the department performs a secondary review.

The third and last review is done at the reporting department were data reviewers go through the data package in detail and verify compliance with the method and client requirements.

## 22. DATA REVIEW AND INTERNAL QUALITY AUDITS

Objective: To design a process to assess compliance of laboratory activities with the operational requirements of the QA manual and to evaluate the performance of all analytical departments. The validation of data must be accomplished by a data review procedure.

22.1 DATA REVIEW: At Chemtech there are several stages for the data review/validation process. The first data review is conducted by the analyst performing the analysis. A secondary review is performed by a department peer. The supervisor reviews the data after the peer review. The OC/Report Production performs the final review.

Analyst Review: The analyst is responsible for ensuring that all work performed meets the specifications and criteria outlined in the Statement of Work. They are to double-check all aspects of their analyses, including instrumental conditions, QA/QC limits, calculations, and compound identification. When manual integration's are performed, the raw data records shall include a complete audit trail for those manipulations. Raw data output showing the results of the manual integration's, a notation of the rationale for the manual integration, including the date and initials/signature of the person performing the manual operation must be included in the raw data file.

Peer Review: A qualified peer performs a technical data review, verifying the analysis logbook that the correct method was used, the accurate analytical sequence was employed, all QA/QC criteria were met, compounds were properly identified, and checked for standard, dilutions, and calculations. The supervisor signs the logbook following this review.

Supervisor Review: Supervisor performs a technical data review to ensure that proper analytical sequence was employed, all QA/QC criteria were met, compounds were properly identified and flagged if required, correct standard, dilutions, and calculations were made.

Quality Control/Report Production Review: The completed data is reviewed by the QC/Report Production. Sample information from the sample receiving documentation is compared to in-house laboratory information to ensure consistency. The data are checked for general completeness, compliance, and QA/QC requirements, and random calculations are performed. If a quality control measure is found to be out of control, and the result are to be report, all samples associated with the failed quality control measure will be reported with the appropriate data qualifier(s).

If a defect is identified in the data package, that can be corrected before the data are released to the client, the data package is returned to the laboratory for corrections along with a CA report form. Immediate action is taken by the affected department to rectify the problem and corrected data package is returned to QC/Report Production office for review and final release of the data.

Spot Check Review by QA/QC Director: The QA/QC Director performs spot-check reviews on data packages before they are released to the client. He/she focuses on all elements of data deliverables including sample identification, sample custody documentation, analytical quality control, and client specifications and requirements.

22.2 INTERNAL QUALITY SYSTEM AUDITS: Annual internal audits are conducted under the direction of the QA/QC Director. These audits are used to detect and correct any specific problems. The audit involves a thorough laboratory inspection to evaluate the following areas: adherence to all laboratory procedures as specified in applicable New Jersey, Pennsylvania, New York and other state regulations; verification of methodology; adherence to all method QC requirements; frequency of duplicates, spikes, blanks, and QC sample analyses; maintenance of documentation in adherence with good laboratory practices; and verification that laboratory equipment, supplies, and reagents are properly maintained. The internal audits also include the analyst qualifications and training documents.

A comprehensive audit checklist is used for the department to be audited based on the method SOP and includes the cycle of a sample analysis beginning from sample receiving till the disposal of the sample and the release of data to the client. Deficiencies are noted on the checklist and CA reports are issued to the area being audited.

Findings of the audit are documented and copies of the findings are given to the Company President, the Technical Director, the Laboratory Manager, and the Department Supervisor. A copy of the findings is also provided to the analyst. Any problems and their prospective resolutions are discussed among the QA/QC Director, Technical Director, and Department Supervisor. After an agreed upon time period, it is the responsibility of the QA/QC Director to ensure that the required corrective action has been implemented. All audit documents are kept on file by the QA/QC Director in the QA office.

Page 62 of 71

#### 23. Electronic Data

Objective: To establish a system to control, verify, validate and document computer software used by LIMS.

23.1 Software: To ensure that the software that is used to collect, analyze, process and or maintain LIMS Raw Data, SOP's are established, approved and managed for:

Testing and quality assurance methods to ensure that all LIMS software accurately performs its intended functions, including acceptance criteria, tests to be used, personnel responsible for conducting the tests, documentation of test results, and test review and approval.

Change control methods that include instructions for requesting, testing, approving, documenting and implementing changes. When indicated, change control methods shall also include reporting and evaluating problems, as well as implementing corrective actions.

23.2 Documentation: Documentation is established and maintained to demonstrate the validity of all software used in the LIMS and includes:

A description of the software and functional requirements; a listing of all algorithms and formulas; and as the occur, testing and quality assurance, installation and operation/enhancement, and retirement.

23.3 Security: SOP's are established to implement appropriate security procedures to assure the integrity of LIMS data are adequate.

23.4 Electronic Audit: The organics laboratory uses two different software packages to collect the data and two different software packages to produce the report.

Both the volatiles and semi-volatiles departments use the combination of Hewlett Packard (HP) Chemstation/Enviroforms and EISC to collect and produce reports.

GC volatiles only use TurboChrom software to process and quantitate the data. TurboChrom generates 3 separate files. The raw file contain no quantitation, only the output from the instrument. The TXT file contain a process file. And the rpt. file contains a detailed report table. The raw file can not be tampered with or change. This file is protected by the software to preserve the original output.

The PST/PCB data is collected on a different version of Chemstation and the EISC — software is used to produce the reports.

HP and EISC have set up security for the data itself and there is no way to effect any changes to the raw data.

Electronic Data

Revision Date: November 13, 2005

Quality Assurance Manual

Revision #: 2001-14

Page 63 of 71

The quantitation is similarly secured by the software in that any data produced has information on it that can be used to determine its origin.

Glossary Revision Date: November 13, 2005

## **Quality Assurance Manual**

Revision #: 2001-14

Page 64 of 71

#### Glossary

1. <u>Acceptance Criteria</u>: specified limits placed on characteristics of an item, process, or service defined in requirement documents.

- 2. <u>Analytical Detection Limit:</u> the smallest amount of an analyte that can be distinguished in a sample by a given measurement procedure throughout a given confidence interval.
- 3. Analyst: the designated individual who performs the "hands-on" analytical methods and associated techniques and who is the one responsible for applying required laboratory practices and other pertinent quality controls to meet the required level of quality.
- 4. Audit: a systematic evaluation to determine the conformance to quantitative and qualitative specifications of some operational function or activity.
- Calibration: to determine, by measurement or comparison with a standard, the correct
  value of each scale reading on a meter, instrument, or other device. The levels of the
  applied calibration standard should bracket the range of planned or expected sample
  measurements.
- 6. Chain of custody: an unbroken trail of accountability that ensures the physical security of samples and includes the signatures of all who handle the samples.
- Confidential Business Information: Information that an organization designates as
  having the potential of providing a competitor with inappropriate insight into its
  management, operation or products.
- 8. <u>Confirmation:</u> verification of the identity of a component through the use of an approach with a different scientific principle from the original method. These may include, but are not limited to: second column confirmation; alternate wavelength, derivatization, mass spectral interpretation, alternative detectors or additional cleanup procedures.
- 9. <u>Corrective Action</u>: the action taken to eliminate the causes of an existing nonconformity, defect or other undesirable situation in order to prevent recurrence.
- 10. <u>Data Audit</u>: a qualitative and quantitative evaluation of the documentation and procedures associated with environmental measurements to verify that the resulting data are of acceptable quality.
- 11. <u>Demonstration of Capability:</u> a procedure to establish the ability of the analyst to generate acceptable accuracy.

Glossary
Revision Date: November 13, 2005

Quality Assurance Manual

Revision #: 2001-14

Page 65 of 71

12. <u>Document Control</u>: the act of ensuring that documents and revisions are proposed, reviewed for accuracy, approved for release by authorized personnel, distributed properly and controlled to ensure use of the correct version at the location where the prescribed activity is performed.

- 13. <u>Holding Times</u>: the maximum times that samples may be held prior to analysis and still be considered valid or not compromised.
- 14. <u>Laboratory</u>: a defined facility performing environmental analyses in a controlled and scientific manner.
- 15. <u>Laboratory Control Sample</u> (lab fortified blank, blank spike, QC check sample): a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes from a source independent of the calibration standards or a material containing known and verified amounts of analytes. It is generally used to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- 16. <u>Manager</u>: the individual designated as being responsible for the overall operation, all personnel, and the physical plant of the environmental laboratory.
- 17. Method Detection Limit: the minimum concentration of a substance an analyte that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
- 18. <u>NELAC standards:</u> the plan of procedures for consistently evaluating and documenting the ability of laboratories performing environmental measurements to meet nationally defined standards established by the National Environmental Laboratory Accreditation Conference.
- 19. Nonconformance: An indication or judgement that a product or service has not met the requirements of the relevant specifications, contract or regulation; also the state of failing to meet the requirements.
- 20. <u>Precision:</u> the degree to which a set of observations or measurements of the same property, obtained under similar conditions, conform to themselves; a data quality indicator.
- 21. <u>Preservation:</u> refrigeration and/or reagents added at the time of sample collection to maintain the chemical and/or biological integrity of the sample.

Glossary

Revision Date: November 13, 2005

### **Ouality Assurance Manual**

Revision #: 2001-14

Page 66 of 71

22. <u>Proficiency testing:</u> a means of evaluating a laboratory's performance under controlled conditions relative to a given set of criteria through analysis of unknown samples provided by an external source.

- 23. Quality Assurance: an integrated system of activities involving planning, quality control, quality assessment, reporting and quality improvement to ensure that a product or service meets defined standards of quality with a stated level of confidence.
- 24. Quality Assurance Plan: a formal document describing the detailed quality control procedures by which the quality requirements defined for the data and decisions pertaining to a specific project are to be achieved.
- 25. Quality Control Sample: an uncontaminated sample matrix spiked with known amounts of analytes from a source independent from the calibration standards. It is generally used to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- 26. <u>Quality System</u>: a structured and documented management system describing the policies objectives, principles, organizational authority, responsibilities, accountability and implementation plan of an organization for ensuring quality in its work processes products and services. The quality system provides the framework for planning, implementing, and assessing work performed by the organization and for carrying out required QA and QC.
- 27. Raw data: any original factual information from a measurement activity or study recorded in a laboratory notebook, worksheets, records memoranda, notes, or exact copies thereof that are necessary for the reconstruction and evaluation of the report of the activity or study.
- 28. <u>Record Retention:</u> The systematic collection, indexing and storing of documented information under secure conditions.
- 29. <u>Reference Method</u>: a method of known and documented accuracy and precision issued by an organization recognized as competent to do so.
- 30. Reporting Limit: A specific concentration at or above the lower quanitation limit that is reported to the client with confidence. It is often defined on a project-specific basis. If set by the client below the lower quanitation limit, method modification is required or the client will be required to accept the lowest technically valid value that can be provided by the laboratory.
- 31. Standard Operating Procedures: a written document which details the method of an operation, analysis or action whose techniques and procedures are thoroughly

Glossary Revision Date: November 13, 2005 **Quality Assurance Manual** 

Revision #: 2001-14

Page 67 of 71

prescribed and which is accepted as the method for performing certain routine or repetitive tasks.

- 32. <u>Technical Director</u>: individuals who has overall resposibility of the technical operation of the environmental testing laboratory.
- 33. <u>Traceability</u>: the property of a result of a measurement whereby it can be related to appropriate standards, generally international or national standards, through an unbroken chain of comparisons

References

Revision Date: November 13, 2005

## **Quality Assurance Manual**

Revision #: 2001-14

Page 68 of 71

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- 2. NELAC, Program Policy and Structure, Revision 11, July 1, 1999.
- 3. NELAC, Quality Systems, Revision 14, June 29, 2000.
- 4. DOD Quality Systems Manual for Environmental Laboratories Version 1
  October 2000

Certificate & Parameters List Revision Date: November 13, 2005 Quality Assurance Manual

Revision #: 2001-14

Page 69 of 71

# 26. Resumes of Key Personnel and Certification list

# 26.1 Certification List

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NJ-NELAP	Certified	20012	30-Jun-06	DW, WW, SHW
NY-ELAP	Certified	11376	1-Apr-06	DW, WW, SHW, AIR
NY-ASP	Certified	11376	1-Apr-06	DW, WW, SHW, AIR
ARIZONA	Certified	AZ0653	10-Feb-06	ww,shw
CONNETICUT	Certified	PH-0649	June 30,2007	DW, WW, SHW
	Certified	E87935	30-Jun-06	. ww,shw
FLORIDA	Certified	E-10355	31-Oct-06	DW, WW, SHW
KANSAS	Certified	296	31-Dec-05	DW
MARYLAND	Certified	M-NJ503	June 30,2006	ww
MASSACHUSETTS		NJ0503	1-Sep-07	DW, WW, GRO,DRO
Maine	Certified			ww, shw
North Carolina	Certified	630	December 31,2005	VVVV, 321VV
OKLAHOMA	Certified	9705	31-Aug-06	WW .
PENNSYLVANIA	Certified	68-548	January 15,2006	DW
RHODE ISLAND	Certified	LAO00259	December 30,2005	DW,WW,SHW, Air
USDA	Certified	S-47647	June 30,2007	Soil Permit
US-Army	Certified	n/a	2-Mar-06	ww,shw
US-Navy	Certified	NFESC 413	7-jun-07	ww,shw
USEPA	CLP(ILM05.3)	CHEMED	N/A	metals, cyanide
USEPA	CLP(SOM1.1)	CHEMED	n/a	VOC,SVOC,PEST,PCI

Certificate & Parameters List Revision Date: November 13, 2005 **Quality Assurance Manual** 

Revision #: 2001-14

Page 70 of 71

26.2 Key Employee Resume

NAME: Divyajit Mehta

POSITION: Technical Director/Laboratory Director

RESPONSIBILITIES: Responsible for all technical efforts of the Laboratory to meet all terms and conditions of EPA contract as well as all of CHEMTECH's clients. Experienced in the analysis of inorganic soil and water samples according to the requirements of the EPA Superfund, Contract Laboratory Program. Hands on experience in the use of the modern analytical instrumentation and wet chemical techniques. Currently responsible for the overall technical performance of the laboratory. Review the technical and QA/QC requirements during the analysis. Oversees the laboratory operations and compliance with all regulations.

EDUCATIONAL BACKGROUND

	Dates A	\ttended	Major	Minor	Degree &
College/University	From	To	Major	Willo	Date
Gujarat University INDIA	1979	1982	CHEMICAL ENGINEERING		BS, 1982
NJIT	1984		CHEMICAL ENGINEERING		INCOMPLETE

PROFESSIONAL EXPERIENCE

Name & Address of Employer: CHEMTECH MOUNTAINSIDE, NJ 1/99-Present Title of Position: CHIEF OF	Responsibilities included: Oversee overall technical laboratory performance and compliance with regulations and contracts.
OPERATIONS/LABORATORY DIRECTOR  Name & Address of Employer: CHEMTECH ENGLEWOOD, NJ 1/89-1/99	Responsibilities included: Responsible for the technical efforts of the inorganic department and compliance with EPA contract
Title of Position: INORGANIC MANAGER	

☐For additional information please see attachment.

#### PROFESSIONAL SKILLS

Hands on experience in a variety of instruments such as GC/MS, ICP, GC and various Wet chemistry techniques. Various training such NELAC training, instrument training and other seminars related with the Analytical procedures and instrumentation.

#### COMPUTER SKILLS

Computer literate- MS Office- MS Word, MS Excel, MS Power Point Use and design of Environmental Data Reduction Software Enviroquant & Enviroforms, LIMS- Sample Master, EISC data reduction Software.

# CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092

NAME:	Divyajit mehta	Position: TECHNICAL DIRECTOR
OTHER ACHIEVE	MENTS OR AWARDS	
Divyajit has complete Region II Organic dat	ed various training in the Environmental field. It ta validation, Sample Master LIMS advance cou	Examples of these are: Inorganic Data validation training, urse, ICP training course and others
Miscellaneous		
·		

NAME: Mildred V. Reyes

Position: QA Officer

DATES: 2002-Present

RESPONSIBILITIES: Enforcement of all QA/QC requirements as per EPA, CLP Protocols and all state regulations that CHEMTECH conduct business with. Internal Audit of the lab. Write and annually update Standard Operating Procedures. Assure that the lab QA/QC practices are kept by conducting Internal Audit Annually. Verify all QC Client Contract compliance and Screening. Provide clients with the technical support they request.

#### EDUCATIONAL BACKGROUND

C. H W. in with	Dates A	Attended	Major	Minor	Degree & Date
College/University	From	To			Date
UNIVERSITY OF PUERTO RICO	1982	1987	Biology		BS 1987
5117 21011 2 1 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1					

PROFESSIONAL EXPERIENCE

Name & Address of Employer: CHEMTECH Mountainside, NJ 07092  Title of Position: QA/QC Supervisor- 1999-2002	Responsibilities included: Supervision of all aspects of data deliverable production, data review of GC/MS Volatile and Semi volatile, Pesticides, PCBs, Herbicides, Metals and Wet Chemistry based on SW 846, EPA, CLP and 40 CFR methodologies. Verify all QC requirements, contract compliance, screening and requirements.
Name & Address of Employer: Analab/ICM Division 205 Campus Plaza 1, Edison, NJ 08837 Title of Position: GC, Supervisor- 1995-1999	Responsibilities included: Supervision of four GC analysts; coordination of work flow and schedule; technical review of all data generated for GC Volatile, Pest, PCB Herbicides analysis; instrument trouble shooting and other technical problems.

□For additional information please see attachment.

#### PROFESSIONAL SKILLS

GC Volatile, Pesticides, PCBs, Herbicides analysis by GC using EPA, SW 846 and 40 CFR methodology. ASP and CLP deliverable.

#### COMPUTER SKILLS

MS Office- MS Excel, MS Word, MS Power Point Use of Environmental data reduction software

Name: Mildred V. Reyes	Position: QA Officer
PROFESSIONAL EXPERIENCE (CONTINUED	
Name & Address of Employer: Cycle Chem, INC Elizabeth, NJ Title of Position: Production Chemist- 1993-1995	Responsibilities included: Perform daily lab analysis on disposal material based on SW 846 and 40 CFR requirements. Analysis included PCB analysis, Metals and Wet Chemistry; inventory of all incoming samples
Name & Address of Employer: Safety Kleen, Linden, NJ Title of Position: Laboratory Technician-1990-1993	Responsibilities included: Senior Technician overseen laboratory operations during night shift. Perform daily lab analysis which included Volatile Organic analysis, PCB analysis, and Wet Chemistry.
OTHER ACHIEVEMENTS OR AWARDS	
Environmental Laboratories Seminar Internal Assessment Training	
Miscellaneous	
-	

# CHEMTECH 284 Sheffield Street Mountainside NJ 07092

## RESUME

NAME: Krupa Dubey

POSITION:

QC Officer

Dates: 10/2002 - Present

RESPONSIBILITIES: Supervision of all aspects of data deliverable production, data review of GC/MS Volatile, GC/MS Semivolatile, Pesticides, PCB, Herbicides, Metals and Wet Chemistry based on SW-

846, CLP and 40 CFR methodology depending on the project requirement.

Verify all QC requirements; contract compliance, screening and method requirements.

**EDUCATIONAL BACKGROUND** 

EDUCATIONAL DACKGROUND	Dates A	Attended	Major	Minor	Degree & Date
College/University	From	To	Major	1/111101	Date
LTM Medical College Mumbai, India	1991	1993	Medical Lab Technology		1996
Khalsa College Mumbai, India	1988	1991	Microbiology		BS, 1993

PROFESSIONAL EXPERIENCE

PROFESSIONAL EXPERIENCE	
Name & Address of Employer: CHEMTECH Consulting 284 Sheffield Street, Mountainside NJ Title of Position & Dates: Supervisor, BNA & Volatiles, 5/2000 – 10/2002	Responsibilities included: Supervision of GC/MS analysts; production scheduling and coordination of workflow. Perform and review GC/MS analyses using SW846, EPA and CLP Methodologies and interpretation of mass spectra. Perform SIM analysis; plot control charts for establishing QC acceptance criteria. Conduct assessments, precision & accuracy, proficiency. Technical data review. Troubleshoot instrument operations and other technical problems.
Name & Address of Employer: CHEMTECH Consulting 205, Campus Plaza 1, Edison, NJ Title of Position & Dates: GC/MS Analyst, 5/1999 – 5/2000	Responsibilities included: Analysis of water, wastewater, soil, and air samples for volatile and semivolatile organics, pesticides and PCBs using SW846, CLP, and USEPA methodologies. Daily maintenance of instruments. Data reduction.

☐For additional information please see attachment.

## PROFESSIONAL SKILLS

- Troubleshooting of GC/MS, Tekmar autosampler
- Data package production using Enviroforms
- Acquisition and analysis of samples using Enviroquant and RTE software
- ASP Deliverables, CLP Deliverables

#### COMPUTER SKILLS

- MS Office MS Word, MS Excel, MS PowerPoint
- Use of Environmental Data Reduction Softwares Enviroquant & Enviroform

Name: Krupa Dubey Po	sition: <i>QC Officer</i>
PROFESSIONAL EXPERIENCE (CONTINUED)	I The state of the state of the second of th
Name & Address of Employer: CHEMTECH Consulting 205, Campus Plaza 1, Edison, NJ Title of Position & Dates Microbiologist, 4/1998 – 4/1999 Name & Address of Employer:	Responsibilities included: Analysis of water samples for Bacteria Count, Total Coliform, and E.coli, Fecal Coliform, and Standard Plate Count using Standard Methods and EPA procedures. BOD, COD, analyses. Preparation of agar media and standard solutions.  Responsibilities included: Supervision of Medical
Medline Pathology Laboratory  Title of Position: Lab Manager, 3/95 – 4/97	Laboratory technologists; scheduling workflow.  Microbiological detection of infectious diseases, serological testing, antibiotic testing, review of laboratory procedures.
Name & Address of Employer: Shree Hospital & ICCU  Title of Position:	Responsibilities included: Agar plating, isolation of bacteria; plate count, bacteria count; preparation of agar media; antibiotic sensitivity testing.
Medial Laboratory Technologist, 3/93 – 2/95  Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Miscellaneous	
· · · · · · · · · · · · · · · · · · ·	

NAME: Hiren Artist

**POSITION: Systems Manager** 

**DATES: June 2003- Present** 

RESPONSIBILITIES: Quality Control of all computer systems, including hardware, software, documentation and procedures. He generates and updates the automated deliverables in accordance to client specifications. Installation, training, maintenance and operation of programs as they pertain to providing open architectured systems that promote adaptability efficiency, reliability and system integration. Develop, designed and implemented CHEMTECH's LIMS system. Develop US Army. US Navy and US Air Force and commercial client EDDs based on each individual requirement.

EDUCATIONAL BACKGROUND

BDUCATIONAL DIACHORAGE.	Dates Attended		Major	Minor	Degree &
College/University	From	To	171AJU1	IVAIALUI	Date
Mithibai College, Bombay India	1992	1996	BS Computer Science		May 1996
National Conega, Demos,	·				

PROFESSIONAL EXPERIENCE

Name & Address of Employer: Chemtech 284 Sheffield Street Mountainside, NJ 07092 Title of Position: Systems Manager assistant Jun 2001-Jun 2002	Responsibilities included: generates and updates the automated deliverables in accordance to client specifications. Assist in the installation, training, maintenance and operation of programs.
Name & Address of Employer: Unisoft Corporation	Responsibilities included: Installation, training, maintenance and operation of programs
Title of Position: System analyst 2000-2001	American de la companya de la compan

☐For additional information please see attachment.

#### PROFESSIONAL SKILLS

Computer programming, internet access expert

## COMPUTER SKILLS

Fortis, Microsoft Office Word, Power Point Excel

# OTHER ACHIEVEMENTS OR AWARDS

Microsoft Certified Systems Engineer

NAME: Oommen V. Kappil Position: GCMS VOA Supervisor

DATES: March 2005-Present

RESPONSIBILITIES: Supervise GC/MS VOA department. Analyze water and soil samples using EPA methods. Preparing data packages to be reported to the client. Keeping track of projects pertaining to the department, scheduling and coordinating workflow within the Volatile department. Troubleshooting of instruments and other technical problems.

## **EDUCATIONAL BACKGROUND**

C-N/IIit-	Dates A	ttended	Major	Minor	Degree &
College/University	From	To	Major		Date
Kerala University India	1982	1987	Chemical Engineering		BS 1987
Kerala University India	1977	1981	Science		BS 1981

PROFESSIONAL EXPERIENCE

Name & Address of Employer: Environmental Labs Services Syracuse, New York Title of Position: Organic Manager 7/2004-3/2005	Responsibilities included: Analysis of Pesticides PCBs, VOC and SVOC using SW 846 methods. Supervise Organic sections. Monitor QC requirements.
Name & Address of Employer: Galson Laboratories Syracuse, NY	Responsibilities included: Analysis of Pesticides PCBs, VOC and SVOC using SW 846 methods. Air analysis by method TO-15. Supervise Organic
Title of Position: Technical Manager 6/1996-7/2004	sections. Monitor QC requirements.

□For additional information please see attachment.

#### PROFESSIONAL SKILLS

- Method 8081, 8082, 8150, 8151, TO-15 (mini cans), 8260
- Data package production using Enviroforms and EISC
- Acquisition and analysis of samples using HP Chemstation and Turbochrom software
- ASP & CLP Deliverables

#### COMPUTER SKILLS

Microsoft Office 95, 98, 2000, XP; Excel, Word

## OTHER ACHIEVEMENTS OR AWARDS

Affiliations: American Chemical Society American Industrial Hygiene Association

NAME: Oommen V Kappil	Position: GCMS VOA Supervisor
PROFESSIONAL EXPERIENCE (CONTINUED)	
Name & Address of Employer: Obrien & Gere Laboratories Services Syracuse, NY Title of Position:	Responsibilities included: Analysis of Pesticides PCBs and Herbicides using SW 846 methods. Report generation
Chemist 10/1989-6/1996  Name & Address of Employer: Genigraphics Corporation Liverpool, NY  Title of Position: QC Inspector 10/1988-6/1989	Responsibilities included: Inspection of Printed circuit boards, equipment according to blueprints, chips programing.
Name & Address of Employer: General Super Plating Company Syracuse, NY Title of Position: Waste Treatment Operator 4/1988-7/1988	Responsibilities included: Operation of Waste treatment plan and compliance.
Name & Address of Employer:  Title of Position:	Responsibilities included:
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Miscellaneous	
·	

# CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092

			RESUMI	C		
Name:	Deepak Patel			Position:	Extractions Superv	isor
DATES: No	v 2003-Present					
extractions a	LITIES: Supervision of malysts. Perform extra Review and updating	ctions on sa	mples for E	t, schedule and c BNA and Pesticid	oordinate workflov le/PCB analyses. U	w for the Updating
Entication	AL BACKGROUND					
	ege/University	Dates A	Attended To	Major	Minor	Degree & Date
Polytechnic	of NY		1975	Chemical Engineering	Environmental	MS 5 / 75
Polytechnic	of NY		1976	Management	Business	MS 5/77
Name & Ac CHEMTEC Edison, NJ	n Supervisor II Idress of Employer: H		departm extracti	ent, schedule and ons analysts. Per	ed: Supervision of I coordinate workf form extractions o analyses. Updatir	low for the n samples for
Title of Pos Organic Ext					lating of Extraction	
□For addit	tional information pleas	se see attach	ment.			
	ing- 8 hour course					
COMPUTER	SKILLS					
OTHER AC	HIEVEMENTS OR AWAR	LDS .				

# CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092

Name:	Position:
PROFESSIONAL EXPERIENCE (CONTINUE	D)
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	<u> </u>
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Miscellaneous	
	•

NAME: Hemex Patel

POSITION: Organic Supervisor

Dates: 6/04- Present

RESPONSIBILITIES: Supervision of the Pest PCB department, flow of work in the department, analysis of samples within the specified holding times, scheduling the work with the analysts, and

training of the new employees.

EDUCATIONAL BACKGROUND

EDUCATIONAL DACISONOUS	Dates A	ttended	Major	Minor	Degree &
College/University	From	To	waju		Date
NJIT NEWARK, NJ	1998		Chemical Engineering		Incomplete
DD Institute of Technology, Nadiad, India	1988	1992	Chemical Engineering		BS 1992

PROFESSIONAL EXPERIENCE

Name & Address of Employer: CHEMTECH Consulting Group Englewood, NJ 07092 6/97-6/04	Responsibilities included: Supervision of General Chemistry department, work flow, analysis of samples within specified holding times, scheduling work for
Title of Position: General Chemistry Supervisor/Analyst	analyst and training of new employees
Name & Address of Employer: AQUATECH Environmental Kearney, NJ	Responsibilities included: Sample analysis using SW 846 methodology. Metal analysis using furnace/AA instrumentation. General Chemistry included BOD,
Title of Position: CHEMIST 11/96-6/97	COD, TPH, TSS, VS phosphorus, etc.

☐For additional information please see attachment.

#### Professional Skills

Extensive experience in EPA methods, NYSDOH, NJDEP and CLP protocols in the inorganic area. Years of experience in the wet analysis of water and soil samples for Hexavalent Chromium, Cyanide, Alkalinity, Sulfate, Chloride, Fluoride, TKN, COD, Ortho-P, Phenolics, Ammonia, Nitrate, Hardness, Acidity, pH, Specific Conductance, Bromide, Surfactant, Turbidity, TSS, VSS, TDS, EP Toxicity and TCLP extractions using USEPA methods.

#### **COMPUTER SKILLS**

MS-Office- MS Excel, MS Word, MS Power Point

Use of environmental Data Reduction Software such as Labtrol, Sample Master, EISC reporting software

# CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092

Name: Hemex Patel	Position: Organic Supervisor
OTHER ACHIEVEMENTS OR AWARDS	
Bran + Lube TRAACS/Auto Analyzer Wo	orkshop 1998
Metrohm Ion Chromatography Systems	2002
PROFESSIONAL EXPERIENCE (CONTINUE	D)
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	· · · · · · · · · · · · · · · · · · ·
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	
MISCELLANEOUS	

# CHEMTECH 205 Campus Plaza 1, Edison, NJ 08837

# RESUME

NAME: Danuta Roguska Position: Inorganics Supervisor

Dates: 5/99 to Present

RESPONSIBILITIES: Supervision of Metals and General Chemistry departments. Flow of work; analyses of samples within holding times, scheduling of work with the analysts, verify the test results performed by analysts. Technical data review of analyses (ICP data run – Methods 6010, 200.7, CLP, Hg data run – Methods 7470, 7471, 245.1, CLP. Report preparation and handle centralize computer system for analytical reports.

#### **EDUCATIONAL BACKGROUND**

C. 11 MI- :	Dates A	Dates Attended		Minor	Degree &
College/University	From	To	Major	Millor	Date
Warsaw University Warsaw, Poland	1976	1981	Chemistry	N/A	BS; 1981

#### PROFESSIONAL EXPERIENCE

I ROLEGO OLONG EAGER CE	
Name & Address of Employer:	Responsibilities included: Analyses of General
Analab Inc.	Chemistry and Metals parameters including cyanide,
205 Campus Plaza 1, Edison, NJ 08837	nitrate-nitrite, TKN, TDS, TSS, BOD, COD, TOC,
Title of Position & Dates:	hardness, etc. of wastewater, drinking water, soil, and
Laboratory Chemist; 9/90 to 5/99	shudges. Reporting of data as required.
Name & Address of Employer:	Responsibilities included: Phenolics distillations,
Analab, Inc.	titrations, PHC, reactive CB (EPA Method 9010, 9012),
Title of Position & Dates:	pH, TSS, TDS, COD, TCLP leaching for solids,
Laboratory Chemist; 9/90 to 4/92	semisolids, drinking-, , ground-, and wastewater.

☐ For additional information please see attachment

#### PROFESSIONAL SKILLS

- Experience in EPA methods, NYSDOH, NJDEP, and CLP requirements.
- Hands on experience for running ICP/Hg analyzer, TOC, Lachate, UV spectrophotometer, etc.
- Troubleshooting of above mentioned instruments.

## **COMPUTER SKILLS**

MS Office – MS Word, MS Excel, MS PowerPoint

Name: Danuta Roguska	Position: Inorganics Supervisor
PROFESSIONAL EXPERIENCE (CONTINUED)	
Name & Address of Employer: Analab Inc. 205 Campus Plaza 1, Edison, NJ Title of Position & Dates: Analyst; 4/92 to 8/99	Responsibilities included: Running AA spectroscope, Flame PE 1100B; AA spectroscope, Furnace PE 5100 HGA & PE4100; Cold vapor Mercury analysis; regular maintenance of AA spectroscopes; analytical reporting.
Name & Address of Employer: Analyst Chem Laboratory Parczew, Poland Title of Position: Analyst; 7/83 to 9/86	Responsibilities included: Wet Chemistry Analytical Methods; procedures – distillation, acid/base titrations, PHC, reactive CN, pH, TSS, TDS, COD.
Name & Address of Employer: Debowa Kloda Middle School Debowa Kloda, Poland  Title of Position: Science Teacher; 9/81 – 6/83	Responsibilities included: Taught Chemistry and Physics; Grades 7-9.
Name & Address of Employer:  Title of Position:	Responsibilities included:
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Miscellaneous	

NAME: Sejal Vyas Position: Inorganic Supervisor

DATES: Sept 2004- Present

RESPONSIBILITIES: Perform General Chemistry analysis as per EPA 600 series, SW 846 and CLP protocols. SOPs updates. Update LIMS system. Troubleshoot instrumentation. Schedule and monitor

personnel's daily routine.

#### **EDUCATIONAL BACKGROUND**

	Dates A	Attended	Major	Minor	Degree &
College/University	From	To	Iviajui		Date
Gujarat University India	1993	1995	Botany		MS 1995
Gujarat University India	1990	1993	Microbiology		BS 1993

PROFESSIONAL EXPERIENCE

Name & Address of Employer: CHEMTECH 284 Sheffield Street Mountainside Title of Position: General Chemistry Analyst June 2000- Sept 2004	Responsibilities included: Analysis of samples using methodology based on EPA series, SW 846 and CLP protocols for Cyanide, Anions, Phenols, Alkalinity, Nitrate, Nitrite, Sulfate, Sulfide and many others. Assist supervisor with daily routine and new staff training.
Name & Address of Employer: Eureka Forbes LTD Ahmedabad, India	Responsibilities included: Drinking Water analysis
Title of Position: Lab Technician	

☐For additional information please see attachment.

#### PROFESSIONAL SKILLS

Extensive experience in EPA methods, NYSDOH, NJDEP and CLP protocols in the inorganic area. Years of experience in the wet analysis of water and soil samples for Hexavalent Chromium, Cyanide, Alkalinity, Sulfate, Chloride, Fluoride, TKN, COD, Ortho-P, Phenolics, Ammonia, Nitrate, Hardness, Acidity, pH, Specific Conductance, Bromide, Surfactant, Turbidity, TSS, VSS, TDS, EP Toxicity and TCLP extractions using USEPA methods.

### COMPUTER SKILLS

Microsoft Office 2000- Excel, Words, LIMS system

#### OTHER ACHIEVEMENTS OR AWARDS

# CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092

Name: Sejal Vyas	Position: Inorganic Supervisor
PROFESSIONAL EXPERIENCE (CONTINUED)	
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Name & Address of Employer:	Responsibilities included:
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Title of Position:	
Name & Address of Employer:	Responsibilities included:
COLL AN 241	
Title of Position:	
Name & Address of Employer:	Responsibilities included:
Title of Position:	
	D
Name & Address of Employer:	Responsibilities included:
Title of Position:	
Miscellaneous	
MINCEDIANTED	
	•

Certificate & Parameters List Revision Date: November 13, 2005 Quality Assurance Manual Revision #: 2001-14

Page 71 of 71

**Nelac Certificate and Parameter list** 

# State of New Jersey Department of Environmental Protection Certifies That

CHATTIECH

Laboratory Contification ID#20

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Regulation Covering The Cartification is Laboratories And Law restricted Measurement 18, 12, 12. 7:18 et. seq.

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National Environmental Landrator Conference

State Certified Environmental Laboratory
to perform the analysis as indicated anythe Annual Certified Parameter List

Expiration Page June 30, 2006



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NJDEP is a NELAP Recognized Accrediting Authority

Joseph F. Aiello, Chief

Office of Quality Assurance

# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



#### Category: CAP03 - Atmospheric Organic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status Certified		NJ	CAP03.00180	AB	GC/MS, Canisters	[BPA TO-15]	Acetaldehyde
	Yes		CAP03.00184	AE	GC/MS, Canistors	[BPA TO-15]	Acetone
Certified	Yes	NJ	CAP03.00185	ÀΕ	GC/MS, Canisters	[EPA TO-15]	Acetonitrile -
Certified	Yes	וא וא	CAP03.00190	AB	GC/MS, Canisters	[EPA TO-15]	Acetophenone
Certified	Yes Yes	NJ	CAP03.00195	AE	GC/MS, Canisters	[EPA TO-15]	Acrolein
Certified	Yes Yes	נא	CAP03.00193	AB .	GC/MS, Canisters	[EPA TO-15]	Acrylamide
Certified			CAP03,00200	AE	GC/MS, Canisters	[EPA TO-15]	Agrylic acid
Certified	Yes	NJ		AE	GC/MS, Canisters	[EPA TO-15]	Acrylonitrile
Certified	Yes	NJ	CAP03.00210		GC/MS, Canisters	[EPA TO-15]	Allyi chloride
Certified	Yes	ИJ	CAP03.00215	AB	•	[EPA TO-15]	Aniline
Centified	Yes	NJ	CAP03,00220	AE	GC/MS, Canisters	[BPA TO-15]	Berrone
Certified	Yes	NJ	CAP03.00225	AE	GC/MS, Canistora	[BPA TO-15]	Benzyl chloride
Certified	Yes	NJ	CAP03.00230	AE	GC/MS, Canistons	[BPA TO-15]	Propiolactone (beta-)
Certified	Yes	NJ	CAP03.00235	AE	GC/MS, Canisters	[EPA TO-15]	Bis (2-chloroethyl) ether
Certified	Yes	N	CAP03.00240	AE	GC/MS, Conisters		Bis (chloromethyl) ether
Certified	Yes	NI	CAP03.00245	AB	GC/MS, Canisters	[EPA TO-15]	Bromodichloromethane
Contilled	Yes	NJ	CAP03.00250	AB	GC/MS, Canisters	[EPA TO-15]	Bromoform
Certified	Yes	NJ	CAP03.00255	AB	GC/MS, Canisters	[BPA TO-15]	Bromomethane
Certified	Yes	NJ	CAP03.00260	AB	GC/MS, Canisters	[BPA TO-15]	Butadiene (1,3-)
Certified	Yes	NJ	CAP03.00265	AB	GC/MS, Canisters	[EPA TO-15]	Carbon disulfide
Certified	Yes	NJ	CAP03.00270	AE	GC/MS, Canisters	[EPA TO-15]	
Certified	Yes	NJ	CAP03.00275	AB	GC/MS, Canisters	[EPA TO-15]	Carbon tetrachloride
Certified	Yes	NJ	CAP03.Q0280	AB	GC/MS, Canisters	[EPA TO-15]	Carbon oxysulfide (Carbonyl sulfide)
Certified	Yes	NJ	CAP03.00285	AE	GC/MS, Canisters	[EPA TO-15]	Catechol
Certified	Yes	NJ	CAP03.00290	AE	GC/MS, Canisters	[EPA TO-15]	Butadiene (2-chloro-1,3-)
Certified	Yes	NJ	CAP03.00295	AB	GC/MS, Canisters	[EPA TO-15]	Chloroscetic sold
Certified	Yes	NJ	CAP03.00300	AB	GC/MS, Canisters	[BPA TO-15]	Chlorobenzene
Certified	Yes	NJ	CAP03.00305	AB	GC/MS, Canisters	[BPA TO-15]	Chloroethano
Certified	Yes	IJ	CAP03.00310	AE	GC/MS, Canistors	[EPA TO-15]	Chloroform
Certified	Yes	NJ	CAP03.00315	AB	GC/MS, Canisters	[BPA TO-15]	Chloromethano
Certified	Yes	NJ	CAP03.00320	AE	GC/MS, Canisters	[EPA TO-15]	Chloromethyl methyl ether
Certified	Yes	NJ	CAP03.00325	AE	GC/MS, Canisters	[EPA TO-15]	Chlorotoluene (2-)

KEY: AE - Air and Emissions, BT - Biological Tissues, DW - Drinking Water, NPW - Non-Potable Water, SCM - Solid and Chemical Materials

# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

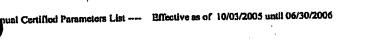
284 SHEFFIELD ST Mountainside, NJ 07092



Category: CAP03 - Atmospheric Organic Parameters

Yes Yes Yes Yes Yes	NJ NJ NJ	Code CAP03.00330 CAP03.00335	Matrix AE	Technique Description	Approved Method	Constitution and d
Yes Yes Yes	NJ		AB		[BPA TO-15]	Cresols/Cresylic acid
Yes Yes	-	CA DO3 00335		GC/MS, Canistors	[EPA TO-15]	Cyclohexane
Yes	NJ		AB	GC/MS, Canistors	[EPA TO-15]	Diazomethane
		CAP03.00340	AE	GC/MS, Canisters	[EPA TO-15]	Dibromo-3-chloropropans (1,2-)
	NJ	CAP03.00345	AB	GC/MS, Canisters	[EPA TO-15]	Dibromoethane (1,2-) (EDB)
Yes	NJ	CAP03.00350	AB	GC/MS, Canisters	- · · · · · · · · · · · · · · · · · · ·	Dichlorobenzene (1,2-)
Yes	NJ	CAP03.00355				Dichlorobenzene (1,3-)
Yes	NJ	CAP03.00360				Dichlorobenzeno (1,4-)
Yes	NJ	CAP03.00365		= •	•	Dichioroethane (1,1-)
Yes	NJ	CAP03.00370			_	Dichloroethans (1,2-)
Yes	NJ	CAP03.00375	AE		•	Dichioroethene (1,1-)
Yes		CAP03.00380	AE	•	•	Dichloroethene (cis-1,2-)
Yes		CAP03.00384	AB			Dichloroethene (trans-1,2-)
Yes		CAP03.00385	AB		•	Dichlorofluoromethane
		CAP03.00390	AE	GC/MS, Canisters	•	Dichloropropane (1,2-)
•		CAP03.00395	AB	GC/MS, Canisters	• '	Dichloropropene (cis-1,3-)
		CAP03.00400	AE	GC/MS, Canisters	•	Dichloropropene (trans-1,3-)
				GC/MS, Canisters	•	Dichlorotetrafluoroethane (1,2-)
				GC/MS, Canisters	•	Diethyl sulfate
				GC/MS, Conisters		·
		•••		GC/MS, Canisters	[EPA TO-15]	Dimethyl sulfate
				GC/MS, Cunisters	[EPA TO-15]	Dimethylaniline (N, N-)
				•	[EPA TO-15]	Dimethylcarbamoyl chloride
					[BPA TO-15]	Dimethyl formamide (N, N-)
•					[EPA TO-15]	Dimethyl hydrazine (1,1)
				•	[BPA TO-15]	Dioxane (1,4-)
				•	[EPA TO-15]	Epichlorohydrin
					[EPA TO-15]	Epoxybutane (1,2-)
					[BPA TO-15]	Ethyl acrylate
				- · · · ·	[EPA TO-15]	Ethyl carbamate
				GC/MS, Canisters	[EPA TO-15]	Ethylbenzene
					[EPA TO-15]	Ethylene Oxide
					[BPA TO-15]	Ethyleneimine
	'es 'es 'es 'es 'es 'es	(es NJ (e	Yes         NJ         CAP03.00355           Yes         NJ         CAP03.00360           Yes         NJ         CAP03.00365           Yes         NJ         CAP03.00370           Yes         NJ         CAP03.00380           Yes         NJ         CAP03.00380           Yes         NJ         CAP03.00380           Yes         NJ         CAP03.00380           Yes         NJ         CAP03.00390           Yes         NJ         CAP03.00395           Yes         NJ         CAP03.00400           Yes         NJ         CAP03.00401           Yes         NJ         CAP03.00405           Yes         NJ         CAP03.00410           Yes         NJ         CAP03.00415           Yes         NJ         CAP03.00420           Yes         NJ         CAP03.00430           Yes         NJ         CAP03.00430           Yes         NJ         CAP03.00440           Yes         NJ         CAP03.00450           Yes         NJ         CAP03.00450           Yes         NJ         CAP03.00466           Yes         NJ         CAP03.00467 <td>Yes         NJ         CAP03,00355         AE           Yes         NJ         CAP03,00360         AB           Yes         NJ         CAP03,00365         AB           Yes         NJ         CAP03,00370         AB           Yes         NJ         CAP03,00375         AB           Yes         NJ         CAP03,00380         AB           Yes         NJ         CAP03,00384         AB           Yes         NJ         CAP03,00385         AB           Yes         NJ         CAP03,00390         AB           Yes         NJ         CAP03,00395         AB           Yes         NJ         CAP03,00400         AB           Yes         NJ         CAP03,00400         AB           Yes         NJ         CAP03,00401         AB           Yes         NJ         CAP03,00410         AB           Yes         NJ         CAP03,00420         AB           Yes         NJ         CAP03,00420         AB           Yes         NJ         CAP03,00425         AB           Yes         NJ         CAP03,00445         AB           Yes         NJ         CAP03,00445</td> <td>  Caro   NJ</td> <td>  CAP03.00355   AB   GC/MS, Canisters   [BPA TO-15]    </td>	Yes         NJ         CAP03,00355         AE           Yes         NJ         CAP03,00360         AB           Yes         NJ         CAP03,00365         AB           Yes         NJ         CAP03,00370         AB           Yes         NJ         CAP03,00375         AB           Yes         NJ         CAP03,00380         AB           Yes         NJ         CAP03,00384         AB           Yes         NJ         CAP03,00385         AB           Yes         NJ         CAP03,00390         AB           Yes         NJ         CAP03,00395         AB           Yes         NJ         CAP03,00400         AB           Yes         NJ         CAP03,00400         AB           Yes         NJ         CAP03,00401         AB           Yes         NJ         CAP03,00410         AB           Yes         NJ         CAP03,00420         AB           Yes         NJ         CAP03,00420         AB           Yes         NJ         CAP03,00425         AB           Yes         NJ         CAP03,00445         AB           Yes         NJ         CAP03,00445	Caro   NJ	CAP03.00355   AB   GC/MS, Canisters   [BPA TO-15]

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials





# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: CAP03 - Atmospheric Organic Parameters

	Eligible to Report				m t d . Sh. duto.	Approved Method	Parameter Description
tatus	NJ Data	State	Code	Matrix	Technique Description		Rihyltoluene (4-)
Certified	Yes	NJ	CAP03.00480	AB	GC/MS, Canisters	[EPA TO-15]	Formaldehyde
Certified	Yes	NJ	CAP03.00485	AB	GC/MS, Canisters	[EPA TO-15]	Hexachlorobutadiene (1,3-)
Certified	Yes	NJ	CAP03.00490	AB	GC/MS, Canisters	[EPA TO-15]	Hexachiorosthane
Certified	Yes	NJ	CAP03.00495	AB	GC/MS, Canisters	[EPA TO-15]	
Certified	Yes	וא	CAP03.00498	AE	GC/MS, Canisters	[EPA TO-15]	Hexanone (2-)
ertified	Yes	NJ	CAP03.00500	ÁE	GC/MS, Canisters	[EPA TO-15]	Heptane (n-)
ertified	Yes	NJ	CAP03.00505	AB	GC/MS, Canisters	[EPA TO-15]	Hexano (n-)
ertified	Yes	NJ	CAP03.00510	. AB	GC/MS, Canisters	[EPA TO-15]	Isophorone
Certified	Yes	NJ	CAP03.00511	AB	GC/MS, Canisters	[EPA TO-15]	Isopropanol
ertified	Yes	`NJ	CAP03.00515	AE	GC/MS, Canisters	[EPA TO-15]	Isopropyibenzene
ertified	Yes	NJ	CAP03.00520	AE	GC/MS, Canisters	[EPA TO-15]	Methyl alcohol (Methanol)
ertified	Yes	NJ	CAP03.00525	AB	GC/MS, Canisters	[EPA TO-15]	Methyl ethyl ketone
ertified	Yes	NJ	CAP03,00530	AB	GC/MS, Canisters	(EPA TO-15)	Methyl iodide
ertified	Yes	NJ	CAP03.00535	AE	GC/MS, Canisters	[EPA TO-15]	Methyl isobutyl ketone
ertified	Yes	NJ	CAP03.00540	AE	GC/MS, Canisters	[EPA TO-15]	Methyl isocyanate
ertified	Yes	NJ	CAP03.00545	AE	GC/MS, Canisters	[EPA TO-15]	Methyl methacrylate
entified	Yes	NJ	CAP03.00550	AB	GC/MS, Canisters	[EPA TO-15]	Methyl tert-butyl ether
ertified	Yes	NJ	CAP03.00555	AB	GC/MS, Canisters	[EPA TO-15]	Methylene chloride (Dichloromethane)
ertified	Yes	יי. עא	CAP03.00560	AB	GC/MS, Canisters	[EPA TO-15]	Methylhydrazine
Certified	Yes	NJ	CAP03.00565	AB	GC/MS, Canisters	[BPA TO-15]	Methylphenol (2-)
ertified	Yes	NJ	CAP03.00570	AB	GC/MS, Canisters	[EPA TO-15]	Nitrobenzene
Certified	Yes	וא	CAP03.00575	AB	GC/MS, Canisters	[EPA TO-15]	Nitropropane (2-)
ertified	Yes	LN LN	CAP03.00580	AE	GC/MS, Canisters	[EPA TO-15]	N-Nitrosodimethylamine
entified	Yes	NJ	CAP03.00585	AB	GC/MS, Canisters	[EPA TO-15]	N-Nitrosomorpholine
ennea enilied	res Yes	NJ	CAP03.00583	AB	GC/MS, Canistors	[EPA TO-15]	N-Nitroso-N-methyluren
ertified	Yes	NJ	CAP03.00595	AE	GC/MS, Canisters	[EPA TO-15]	Phenoi
eruneu ertified	Yes	NJ	CAP03.00593	AB AB	GC/MS, Canisters	[EPA TO-15]	Phosgene
ertified	Yes	NJ	CAP03.00605	AE	GC/MS, Canisters	[EPA TO-15]	Propionaldehyde
ortified	Yes	NJ	CAP03.00610	AE	GC/MS, Canisters	[EPA TO-15]	Propylensimine (1,2-)
crtified	Yes	NJ	CAP03.00615	AB	GC/MS, Canisters	[EPA TO-15]	Propylene oxide
entified	Yes	NJ	CAP03.00620	AE	GC/MS, Canisters	[EPA TO-15]	Propane sultone (1,3-)
entified	Yes	NJ	CAP03.00625	AE	GC/MS, Canisters	[EPA TO-15]	Styrene

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# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092

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Category: CAP03 - Atmospheric Organic Parameters

	Sligible to Report			•		A Beathed	Parameter Description
	VJ Data	State	Code	· Matrix	Technique Description	Approved Method	Styrene oxide
	Yes	NJ	CAP03,00630	AE	GC/MS, Canisters	[EPA TO-15]	Trichlorobenzene (1,2,4-)
	Yes	NJ	CAP03.00635	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylbenzene (1,3,5-)
	Yes	NJ	CAP03.00640	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylbenzene (1,2,4-)
	Yes	NJ	CAP03,00645	AE	GC/MS, Canisters	[EPA TO-15]	Trimethylpentane (2,2,4-)
	Yes	NJ	CAP03.00650	AE .	GC/MS, Canisters	[EPA TO-15]	Tetrachloroethane (1,1,2,2-)
	Yes	NJ	CAP03.00655	AE	GC/MS, Canisters	[EPA TO-15]	Tetrachloroethene
	Yes	NJ	CAP03.00660	AE	GC/MS, Canisters	[EPA TO-15]	Toluene
• • • • • • • • • • • • • • • • • • • •	Yes	NJ	CAP03.00665	AE	GC/MS, Canisters	[EPA TO-15]	Trichloroethane (1,1,1-)
	Yes	NJ	CAP03.00670	AB	GC/MS, Canisters	[EPA TO-15]	•••
		NJ LN	CAP03.00675	AB	GC/MS, Canisters	[EPA TO-15]	Trichloroethane (1,1,2-)
	Yes Yes	NJ	CAP03.00680	AB	GC/MS, Canisters	[EPA TO-15]	Trichloroethene
	Yes Yes	NJ	CAP03.00684	AB	GC/MS, Canisters	[BPA TO-15]	Trichicrofluoromethane
	res Yes	NJ	CAP03.00685	AE	GC/MS, Canisters	[EPA TO-15]	Trichloro (1,1,2-) trifluorosthane (1,2,2-)
		נא	CAP03.00690	AB	GC/MS, Canisters	[EPA TO-15]	Tricthylamine
	Yes	NJ	CAP03.00695	AB	GC/MS, Canisters	[EPA TO-15]	Trifluoromethane
	Yes		CAP03.00700	AB	GC/MS, Canisters	[BPA TO-15]	Vinyl acetate
	Yes	NJ	CAP03.00705	AB	GC/MS, Canistons	[EPA TO-15]	Vinyl bromide
	Yes	NJ	CAP03.00710	AE	GC/MS, Canisters	[EPA TO-15]	Vinyl chloride
	Yes	NJ	CAP03.00715	AB	GC/MS, Canisters	[EPA TO-15]	Xylene (m-)
	Yes	NJ	CAP03.00713	AB	GC/MS, Canisters	[EPA TO-15]	Xylene (o-)
	Yes	NJ		AE	GC/MS, Canisters	[EPA TO-15]	Xylene (p-)
• • • • • • • • • • • • • • • • • • • •	Yes	NJ	CAP03.00725	AB	GC/MS, Canisters	[EPA TO-15]	Xylenes (total)
	Yes	NJ	CAP03.00730	AE AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Acetic acid
<b>P</b>	No	NJ	CAP03.00735		GC/MS, Sorbent Tubes	[EPA TO-17]	Acetone
•	No	NJ	CAP03.00740	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Acetonitrile
	No	NI	CAP03.00745	AB	GC/MS, Sorbent Tubes	[BPA TO-17]	Acrylonitrile
	No	NJ	CAP03.00750	ΫB	GC/MS, Sorbent Tubes	[EPA TO-17]	Aniline
	No	NJ	CAP03.00755	AB	GC/MS, Sorbent Tubes	(BPA TO-17)	Bonzene
	No	NJ	CAP03.00760	AB '	GC/MS, Sorbent Tubes	[BPA TO-17]	Butane
	No	NJ	CAP03.00765	AB AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Butanol (1-)
	No	NJ	CAP03.00770	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Butoxyethanol
	No	NJ	CAP03.00775	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butoxyethylacetate
pplied	No	NJ	CAP03.00780	AB	*	tanta a seria de la constanta	• •

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



#### Category: CAP03 - Atmospheric Organic Parameters

Eligible to
D

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	CAP03.00785	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Butyl Acetate (n-)
Applied	No	NJ	CAP03.00790	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butyl Acetate (tert-)
Applied	No	NJ	CAP03.00795	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Butyi aldehyde
Applied	No	NJ	CAP03.00800	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Carbon tetrachloride
Applied	No	NJ	CAP03.00805	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Chiorobenzene
Applied	No	ŊJ	CAP03.00810	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Cyclohexanone
Applied	No	NJ	CAP03.00815	AB	GC/MS, Sorbent Tubes	[BPA TO-17]	Decane (n-)
Applied	No	NJ	CAP03.00820	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Dichloroethane (1,2-)
Applied	No	NJ	CAP03.00825	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Dodccane (n-)
Applied	No	NJ	CAP03.00830	ÁE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethanoi
Applied	No	NJ	CAP03.00835	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethoxyethanol
Applied	No	NI	CAP03.00840	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethoxyethylacetate
Applied	No	NJ	CAP03.00845	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethyl acetato
Applied	No	NJ	CAP03.00850	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethyl acrylate
Applied	No	NJ	CAP03.00855	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethylbenzene
Applied	No	NJ	CAP03.00860	AB	GC/MS, Sorbest Tubes	[EPA TO-17]	Ethylbenzene (1-methyl-2-)
Applied	No	NJ	CAP03.00865	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethylbenzene (1-methyl-3-)
Applied	No	NJ	CAP03.00870	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Ethylbenzene (1-methyl-4-)
Applied	No	NJ	CAP03.00875	AB	GC/MS, Sorbent Tubes	[BPA TO-17]	Purforal '
Applied	No	NJ	CAP03.00880	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Heptane (n-)
Applied	No	NJ	CAP03.00885	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Hexane (n-)
Applied	No	NJ	CAP03.00890	AB	GC/MS, Sorbont Tubes	[EPA TO-17]	iso-butyi alcohol
Applied	No	NJ	CAP03,00895	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Isobutylacotate
Applied	No	NJ	CAP03,00900	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Isophorone
Applied	No .	NJ	CAP03.00905	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Isopropanol
Applied	No	NJ	CAP03,00910	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Isopropyl acetate
Applied	No	NJ	CAP03.00915	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Isopropylbenzene
Applied	No	NJ	CAP03,00920	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Maleic anhydride
Applied	No	M	CAP03.00925	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Methoxyethanol (2-) (methyl cellosolve)
Applied	No	NJ	CAP03.00930	AB	GC/MS, Sorbent Tubes	[RPA TO-17]	Methoxyethylacetate
Applied	No	NJ	CAP03.00935	AB	GC/M8, Sorbent Tubes	[EPA TO-17]	Methoxypropanol
Applied	No	NJ	CAP03.00940	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl alcohol (Methanol)

KEY: AB = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: CAP03 - Atmospheric Organic Parameters

	Eligible to Report				M. akatawa Basadatlan	Approved Method	Parameter Description
Status .	NJ Data	State	Code	Matrix	Technique Description	[BPA TO-17]	Methyl ethyl ketone
Applied	No	NJ	CAP03.00945	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl isobutyl ketone
Applied	No	NJ	CAP03.00950	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl methacrylate
Applied	No	NJ	CAP03.00955	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl tort-butyl ether
Applied	No	NJ	CAP03.00960	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Methyl acetate
Applied	No	NJ	CAP03.00965	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Methylene chloride (Dichloromethane)
Applied	No	NJ	CAP03.00970	- AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Methylstyrene
Applied	No	NJ	CAP03.00975	AB	GC/MS, Sorbent Tubes	[BPA TO-17]	Nitrobenzene
Applied	No	NJ	CAP03.00980	AB	GC/MS, Sorbent Tubes	•	Nonane (-n)
Applied	No	NJ	CAP03.00985	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Propyl Alcohol (n-)
Applied ·	No	NJ	CAP03.00990	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Octane (-n)
Applied	No	NJ	CAP03.00995	AE	GC/MS, Sorbent Tubes .	[EPA TO-17]	Octanol (1-)
Applied	No	NJ	CAP03.01000	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Pentane (-n)
Applied	No	NJ	CAP03.01005	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1016
Applied	No	NJ	CAP03.01010	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1221
Applied	No	NJ	CAP03.01015	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB  221
Applied	No	נא	CAP03.01020	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	,
	No	NJ	CAP03.01025	AB	GC/MS, Sorbent Tubes	[RPA TO-17]	PCB 1242
Applied	No	NJ	CAP03.01030	AB	GC/MS, Sorbent Tubes	[BPA TO-17]	PCB 1248
Applied	No	נא	CAP03.01035	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1254
Applied	*	NJ	CAP03.01040	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	PCB 1260
Applied	No	NJ	CAP03.01045	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Phenol
Applied	No		CAP03.01050	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Propionitrile
Applied	No	NJ NJ	CAP03.01055	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Propyl acetate
Applied	No	NJ	CAP03.01055	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Pyridine
Applied	No		CAP03.01065	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Propyibenzene (n-)
Applied	No	NJ	CAP03.01003	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Styrene
Applied	No	NJ LN	CAP03.01075	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Tetrachloroethane (1,1,1,2-)
Applied	No No	NJ NJ	CAP03.01073	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Tetrachioroethane (1,1,2,2-)
Applied Applied	No No	NJ	CAP03.01085	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Tetrachioroethene
Applied	No	N	CAP03.01090	AB	GC/MS, Sorbent Tubes	[EPA TO-17]	Toluene
Applied	No	נא	CAP03.01095	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trichloroethane (1,1,1-)
Applied	No	N	CAP03.01100	AE	GC/MS, Sorbent Tubes	[EPA TO-17]	Trichloroethane (1,1,2-)
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KEY: AB = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials



#### National Environmental Laboratory Accreditation Program

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Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



#### Category: CAP03 - Atmospheric Organic Parameters

Eligible to Report

iption
(1,2,3-)
(1,2,4-)
(1,3,5-)
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#### Category: SDW02 - Inorganic Parameters Including Na + Ca

Eligible to Report

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SDW02.01000	DW	Nephalometric	[EPA 180.1] [SM 2130 B]	Turbidity
Certified	Yes	N	SDW02.02000	DW	Automated Cadmium Reduction	[BPA 353,2] [SM 4500-NO3 F]	Nitrate
Certified	Yes	NJ	SDW02.04000	DW	ion Chromatography	[EPA 300.0]	Nitrate
Certified	Yes	NJ	SDW02.06000	DW	Automated Cadmium Reduction	[SM 4500-NO3 F]	Nitrite
Certified	Yes	NJ	SDW02.08000	DW	lon Chromatography	[EPA 300.0]	Nitrite
Certified	Yes	NJ	SDW02.13000	DW	Manual Potentiometric Ion Select Ricctrode	[SM 4500-F C]	Fluoride
Certified	Yes	NJ	SDW02.14000	DW	ion Chromatography	[EPA 300,0]	Fluoride
Certified	Yes	NJ	SDW02.15200	DW	Spectrophotometric, Distill, Semi Automated	[EPA 335.4]	Cyanide
Certified	Yes	NJ	SDW02.18100	. DW	Turbidity, Spectrophotometric	[SM 4500-804 E]	Sulfate
Certified	Yes	NJ	SDW02.19000	DW	lon Chromatography	[EPA 300.0]	Sulfate
Suspended	No	NJ	SDW02,20000	.DW	ICP	[SM 3120 B]	Sodium
Certified	Yes	NJ	SDW02,24000	DW	Gravimetric At 180	(SM 2540 C)	Total dissolved solids (TDS)
Certified	Yes	NJ .	SDW02.27000	DW	ICP	[BPA 200.7] [SM 3120 B]	Calcium
Certified	Yes	NJ	SDW02.27200	DW	Ca + Mg as Carbomates	[EPA 200.7]	Calcium-hardness
Certified	Yes	NJ	SDW02.27300	DW	Hardness By Calculation	[EPA 200.7]	Total hardness
Certified	Yes	NJ	SDW02,28000	DW	Titrimetric Indicator	[SM 2320 B]	Alkalinity
Certified	Yes	NJ	SDW02.29000	DW	Ricctrometric Titration	[SM 2320 B]	Alkalinity
Certified	Yes	NJ	SDW02,29310	DW	Automated Phenate	[SM 4500-NH3 G]	Ammonia
Applied	No	NJ	SDW02.29500	DW	Ion Chromatography	[EPA 300.0]	Bromide
Certified	Yes	NJ	SDW02.30000	DW	Potentiometric	[SM 4500-CI D]	Chloride

## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SDW02 - Inorganic Parameters Including Na + Ca

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method [RPA 300.0]	Parameter Description Chloride
Certified	Yes	NJ	SDW02.31000 SDW02.31100	DW DW	ion Chromatography ion Chromatography	[EPA 300.0]	Chlorate
Contified Contified	Yes Yes	NJ U	SDW02.31120	DW	ion Chromatography ion Chromatography	[EPA 314.0] [EPA 300.1]	Perchlorate Chiorite (monthly)
Applied Applied	No No	נא נא	SDW02.31200 SDW02.31240	D <del>M</del> DM	Amperometric, Titration	[SM 4500-CIO2 E] [EPA 300.1]	Chlorite (daily) Bromate
Certified Certified	Ycs Yes	NJ NJ	SDW02.31400 SDW02.32000	DW DW	lon Chromatography Platinum-Cobait	[SM 2120 B]	Color Foaming agents
Cortified	Yes	NJ	SDW02.33000 SDW02.34000	DW DW	Methylene Blue Consistent Series	[SM 5540 C] [SM 2150 B]	Odor
Certified Certified	Yes Yes	NJ NJ	8DW02,35000	DW	Conductance ICP	[SM 2510 B] [EPA 200.7]	Conductivity Silica
Applied Certified	No Yes	נא נא	SDW02.36400 SDW02.37000	DW DW	Colorimetric	[SM 4500-P B] [BPA 300.0]	Orthophosphate Orthophosphate
Certified Certified	Yes Yes	NJ LN	SDW02.38000 SDW02.39600	DW DW	ion Chromatography High Temp. Combustion	[SM 5310 B]	Total organic carbon (TOC) Total organic carbon (TOC)
Certified Certified	Yes Yes	N LN	SDW02.39610 SDW02.40000	DW DW	Persulfate-UV Pyrolysis, Titrimetric	[SM 5310 C] [SM 5320 B]	Total organic halides (TOX)

Category: SDW03 - Analyze-Immediately Inorganic Parameter

Kligible to

	Report		<b>-</b> .	5.6 - A-d	Technique Description	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix			Chlorine - residual
C-wiC-d	V	NJ	SDW03.03000	DW	DPD, Colorimetric	[SM 4500-Cl G]	<del></del>
Certified	Yes		# <b>-</b> ** *	<del></del>	Martina	ISM 4500-H B]	рH
Certified	Yes	N	8DW03.08000	DW	Electrometric	•======================================	Temperature
	Yes	NJ	SDW03.09000	DW	Thermometric	[SM 2550 B]	: Antiverse
Certified	YCS	NO.	015 is 62 to 2000				

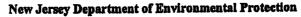
Category: SDW04 - Inorganic Parameters, Metals

Eligible to

	Report NJ Data		<b>6</b> -4-	· Matrix	Technique Description	Approved Method	Parameter Description
Status	Lia nuru	State	Code			FED 4 200 TI (E) 4 2170 D)	Aluminum
Certified	Yes	NJ	SDW04.03000	DW	ICP	[EPA 200.7] [SM 3120 B]	***************************************
			SDW04.03100	DW	ICP/MS	[EPA 200.8]	Aluminum
Certifical	Yes	NJ	30404.03100	LJ VV	190 (1)10	•	







### National Environmental Laboratory Accreditation Program

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Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SDW04 -- Inorganic Parameters, Metals

Eligible to
Report

Status	Neport NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	SDW04.05000	DW	AA, Graphite Furnace	[SM 3113 B]	Antimony
Certified	Yes	וא	SDW04.07000	DW	ICP/M8	[EPA 200.8]	Antimony '
Certified	Yes	NJ	SDW04.11000	DW	ICP	[BPA 200.7]	Arsenic
Certified	Yes	NJ	SDW04.12000	DW	ICP/MS	[EPA 200.8]	Arsenic
Certified	Yes	NJ	SDW04.16000	DW	ICP	[EPA 200.7]	Barium
Certified	Yes	עו	SDW04.17000	DW	ICP/MS	[EPA 200.8]	Barium
Certified	Yes	NJ	SDW04.20000	DW	ICP	[EPA 200.7]	Beryllium
Certified	Yes	N	SDW04.21000	DW	ICP/MS	[BPA 200.8]	Beryllium
Certified	Yes	NJ	SDW04.24000	DW	ICP	[EPA 200.7]	Cadmium
Certified	Yes	מא	SDW04.25000	DW	ICP/MS	[BPA 200.8]	Cadmium
Certified	Yes	א ער	SDW04.28000	DW	ICP .	[BPA 200.7]	Chromium
Certified	Yes	וא נא	SDW04.29000	DW	ICP/MS	[EPA 200.8]	Chromium
Centified	Yes	עו	SDW04.33000	DW	ICP	[EPA 200.7]	Copper
Certified	Yes	NJ	SDW04.34000	DW	ICP/MS	[EPA 200.8]	Copper
Certified	Yes	NJ	SDW04.37000	DW	ICP	[EPA 200,7] [SM 3120 B]	lon
	No.	NJ	SDW04.38000	DW	Graphite Furnace	[9M 3113 B]	Lead
Applied Certified	Yes	NJ	SDW04.40000	DW	ICP/MS	[EPA 200.8]	Lead
Certified	Yes	NJ	SDW04.41100	DW	ICP	[EPA 200,7]	Magnesium
Certifled	Yes	NJ	SDW04.44000	DW	ICP	[EPA 200.7]	Manganose
Certified	Yes	NJ	SDW04.45000	DW	ICP/MS	[EPA 200.8]	Manganese
Certified	Yes	NJ	SDW04.46000	DW	Manual Cold Vapor	[BPA 245,1]	Mercury
Certified	Yes	NJ	SDW04.52000	DW	ICP	[EPA 200.7]	Nickei
Certified	Yes	NJ	SDW04,53000	DW	ICP/M8	[EPA 200.8]	Nickel
	No	NJ	SDW04.55000	DW	AA, Graphite Furnace	[SM 3113 B]	Selenium
Applied Certified	Yes	NJ	SDW04.57000	DW	ICP/MS	[EPA 200.8]	Selenium
Certified	Yes	וא נא	SDW04.62000	DW	ICP	[BPA 200.7] [SM 3120 B]	Silver
Certified	Yes	NJ	SDW04.63000	DW	ICP/M8	[EPA 200.8]	Silver
Applied	No	NJ	SDW04.64000	DW	AA, Platform Furnace	[EPA 200.9]	Thallium
Certified	Yes	NJ	SDW04.63000	DW	ICP/MS	[BPA 200.8]	Thelium
Certified	Yes	NJ	SDW04.67000	DW	ICP	[EPA 200.7] [SM 3120 B]	Zinc
Certified	Yes	NJ	SDW04.68000	DW	ICP/M8	[EPA 200.8]	Zinc

### National Environmental Laboratory Accreditation Program

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Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SDW06 - Organic Parameters, Chromatography/MS

-	Eligible to Report	•				A	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Bromoform
Certified	Yes	NJ	SDW06.01010	DW	GC/MS, P & T or Direct injection, Capillary	[BPA 524.2]	Chloroform
Certified	Yes	NJ	SDW06.01020	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dibromochloromethane
Certified	Yes	NJ	SDW06.01030	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	
Certified	Yes	NJ	SDW06.01040	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Bromodichloromethane
Certified	Yes	NJ	SDW06.02010	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Benzens
Certified	Yes	NJ	SDW06.02020	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Carbon tetrachloride
Certified	Yes	NJ	SDW06.02030	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chlorobenzene
Certified	Yes	NJ	SDW06.02040	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	SDW06.02050	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	SDW06.02060	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichlarobenzene (1,4-)
Certified	Yes	נא	SDW06.02070	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichioroethane (1,1-)
Certified	Yes	NJ	SDW06.02080	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloroethane (1,2-)
Certified	Yes	NJ	SDW06.02090	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichioroethene (cis-1,2-)
Certified	Yes	N	SDW06.02100	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloroethene (trans-1,2-)
Certified	Yes	N	SDW06.02110	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methylene chloride (Dichloromethane)
Certified	Yes	עא	SDW06.02120	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropans (1,2-)
Certified	Yes	N	SDW06.02130	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Ethylbenzene
Certified	Yes	NJ	SDW06.02140	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl tert-butyl ether
Certified	Yes	NJ	SDW06.02150	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Naphthalene
Certified	Yes	NJ	SDW06.02160	DW	GC/MS. P & T or Direct Injection, Capillary	[EPA 524.2]	Styrene .
Certified	Yes	NJ	SDW06.02170	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tetrachloroethane (1,1,2,2-)
Certified	Yes	NJ	SDW06.02180	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Tetruchloroethene
Certified	Yes	NJ	SDW06,02190	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloroethane (1,1,1-)
Certified	Yes	NJ	SDW06.02200	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichlomethene
	Yes	NJ	SDW06.02210	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Toluene
Certified Certified	Yes	NJ	SDW06.02220	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloroberzzene (1,2,4-)
Certified	Yes	NJ	SDW06.02230	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524,2]	Dichloroethene (1,1-)
Certified	Yes	נא נא	SDW06,02240	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524,2]	Trichloroethanc (1,1,2-)
Certified	Yes	IN.	8DW06,02250	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524,2]	Vinyi chloride
Certified	Yes	נא	SDW06.02260	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Xylenes (total)
Certified	Yes	נא	SDW06.03010	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Bromobenzene
Certified	Yes	NJ	SDW06.03020	DW	GC/MS, P & T or Direct Injection, Capillary	[HPA 524.2]	Bromochloromethane





### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SDW66 - Organic Parameters, Chromatography/MS

	Eligible to Report		·			A	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Bromonethane
Certified	Yes	NJ	SDW06.03030	DW	GC/MS, P & T or Direct Injection, Capillary	[HPA 524.2]	Butyi benzene (n-)
Certified	Yes	NJ	SDW06.03040	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Sec-butylbenzene
Certified	Yes	NJ	SDW06.03050	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	
Certified	Yes	NJ	SDW06.03060	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tert-butylbenzene
Certified	Yes	NJ	SDW06.03070	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chloroethane
Certified	Yes	NJ	SDW06.03080	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chloromethane
Certified	Yes	NJ	SDW06.03090	DW	GC/MS, P & T or Direct Injection, Capillary	(EPA 524.2)	Chlorotoluene (2-)
Certified	Yes	NJ	SDW06.03100	DW	GC/MS, F & T or Direct Injection, Capillary	[EPA 524.2]	Chlorotoluene (4-)
Certified	Yes	NJ	SDW06.03110	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	N	SDW06.03120	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Dibromoethane (1,2-) (EDB)
Certified	Yes	ИJ	SDW06.03130	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Dibromomethane
Certified	Yes	NJ	SDW06.03140	DW	GC/MS, P & T or Direct Injection, Capillary	(BPA 524.2)	Dichlorodifluoromethane
Certificd	Yes	LN	SDW06.03150	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropana (1,3-)
Certified	Yes	NJ	SDW06.03160	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524,2]	Dichloropropane (2,2-)
Certified	Yes	NJ	SDW06.03170	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Dichloropropene (1,1-)
Contilled	Yes	NJ LIN	SDW06.03180	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Dichloropropene (cis-1,3-)
Certified	Yes	NJ	SDW06.03190	DW	GC/MS. P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropene (trans-1,3-)
Certified	Yes	NJ	SDW06.03200	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Hexachlorobutadiene (1,3-)
Certified	Yes	ИJ	SDW06.03210	DW	GC/M5, P & T or Direct Injection, Capillary	[EPA 524.2]	Isopropylbenzene
Certified	Yes	NJ	SDW06.03220	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Isopropyltoluene (4-)
Certified	Yes	IJ	SDW06.03230	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Propylbenzene (n-)
Certified	Yes	NJ	SDW06.03240	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Tetrachloroethane (1,1,1,2-)
Certified	Yes	NJ	SDW06.03250	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichlorobenzene (1,2,3-)
Centified	Yes	נא	SDW06.03260	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Trichlorofluoromethane ·
Certified	Yes	NJ	SDW06.03270	· DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trichloropropane (1,2,3-)
Certified	Yes	NJ	SDW06.03280	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Trimethylbenzene (1,2,4-)
Certified	Yes	וא עא	8DW06.03300	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trimethylbenzene (1,3,5-)
ertified	Yes	ľ	SDW06.03310	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Nitrobenzene
entified	Yes	IJ	SDW06.03410	DW	GC/MS, P & T or Direct Injection, Capillary	(EPA 524.2)	Acetone
ertified	Yes	NJ	SDW06,03420	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Acrylonitrile
Certified	Yes	NJ	SDW06,03430	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Aliyi chloridə
Certified	Yes	NJ	SDW06.03440	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Butanone (2-)

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Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SDW06 - Organic Parameters, Chromatography/MS

	Eligible to Report						
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SDW06.03450	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Carbon disulfide
Certified	Yes	NJ	SDW06.03460	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Chloroacetonitrile
Certified	Yes	NJ	SDW06.03470	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Chlorobutane (1-)
Certified	Yes	NJ	SDW06.03480	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Dichloro-2-butene (trans-1,4-)
Certified	Yes	NJ	SDW06.03490	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Dichloropropanone (1,1-)
	Yes	N	SDW06.03500	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Diethyl other (Ethyl ether)
Certified	Yes	NJ	SDW06.03510	DW	GC/MS, P & T or Direct Injection, Capillary	(EPA 524.2)	Ethyl methacrylate
Certified		NJ	SDW06.03520	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Hexachloroethane
Certified	Yes	N	8DW06.03530	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Hexanone (2-)
Certified	Yes	NJ	SDW06.03540	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methacrylonitrile
Certified	Yes	א ער	SDW06.03550	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl acrylate
Certified	Yes		SDW06.03560	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl lodide
Certified	Yes	N) UN	SDW06.03570	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Methyl methacrylate
Certified	Yes Yes	N	SDW06.03580	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Pentanone (4-methyl-2-)
Certified	Yes	N	SDW06.03590	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Nitropropane (2-)
Certified	Yes	N	SDW06,03600	DW	GC/MS, P & T or Direct Injection, Capillary	[BPA 524.2]	Pentachloroethane
Certified	Yes	N	SDW06.03610	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Propionitrile
Certified	Yes	NJ	SDW06.03620	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Tetrahydro furan
Certified Certified	Yes	נא	SDW06.03630	DW	GC/MS, P & T or Direct Injection, Capillary	[EPA 524.2]	Trishlorobenzene (1,2,3-)

Category: SHW03 - Analyze-Immediately Parameters

	migrate to	•					· · · · · · · · · · · · · · · · · · ·
O4-4	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status			SHW03.02000	NPW	Thermometric	[SM 2550 B]	Temperature
Certified	Yes	NJ	311 W U 3.V L U V V	149 11	1 HAI III AHAMA		

Category: 5HW04 -- Inorganic Parameters

	Eligible (o	'			•		
Status	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.01000	NPW	Acid Digestion/Surface and Groundwater, ICP,	[SW-846 3005A, Rev. 1, 7/92]	Metals, Total Rec and Dissolved
					FLAA		•





### National Environmental Laboratory Accreditation Program

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Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



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Category:	SHW04 - I	norganic	Parameters				
	Eligible to	•			•		
Status	Report NJ Data	State	Cade	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.01500	NPW	Acid Digestion/Aqueous Samples, ICP, FLAA	[SW-846 3010A, Rev. 1, 7/92]	Metals, Total
Categoryı	SHW05 C	Organic P	arameters, Prep. /	Screening			
	Eligible to Report	•					
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW05.01000	NPW	Separatory Funnel Extraction	[SW-846 3510C, Rev. 3, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.02000	NPW	Continuous Liquid-Liquid Extraction	[SW-846 3520C, Rev. 3, 12/96]	Semivolatile organics
Applied	No	NJ	SHW05.02100	NPW	Solid Phase Extraction (SPE)	[SW-846 3535, Rev. 0, 12/96]	Semivolatile organics
Certified	Yes	נא	SHW05.07000	NPW	Purge & Trap Aqueous	[SW-846 5030B, Rev. 2, 12/96]	Volatile organics
Category:	SHW09 N	<b>Aiscell</b> an	ous Parameters				
	Eilgible to Report	•			•		
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW09.06000	NPW	Combustion, Titration	[SW:846 9020B, Rev. 2, 9/94]	Total organic halides (TOX)
Certified	Yes	NJ	SHW09.17000	NPW	Wheatstone Bridge	[SW-846 9050A, Rev. 1, 12/96]	Specific conductance
Certified	Yes	NJ	SHW09,22000	NPW	Colorimetrio, Auto, 4AAP Distillation	[SW-846 9066, Rev. 0, 9/86]	Phenois
Category:	WPP01 - N	Alcrobiol	gical Parameters		• .		•
	Eligible to Report	)				• .	
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP01.02000	NPW	Membrane Filter (MF), Single Step	[SM 9222 D]	Fecal coliform
Certified	Yes	NJ	WPP01.04000	NPW	MF Single Step or Two Step	[SM 9222 B]	Total coliform
Certified	Yes	NJ	WPP01.06000	NPW	Membrane Filter	[SM 9230 C]	Fecal streptococci
Certified	Yes	NJ	WPP01.09000	NPW	Membrane Filter	[SM 9230 C]	Enterosocci
Applied	No	NJ	WPP01.10000	NPW	Pour Plate	[SM 9215 B]	Heterotrophic plate count

# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPF02 - Inorganic Parameters, Nutrients and Dema

•	Eligible to Report				Workshave Description	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	[BPA 305.1] [ASTM D1067-92]	Acidity as CaCO3
Certified	Yes	NJ	WPP02.01000	NPW	Electrometric or Phenolphthalcin Electrometric or Color Titration	[SM 2320 B]	Alkalinity as CaCO3
Certified	Yes	NJ	WPP02.01500	NPW		[EPA 350.2] [SM 4500-NH3 B, E]	Ammonia
Certified	Yes	NJ	WPP02.03000	NPW ·	Distillation, Titration	[EPA 350.2 + .1] [SM 4500-NH3 H]	Ammonia
Certified	Yes	NJ	WPP02.04000	NPW	Distillation, Automated Phonate	[EPA 405.1] [SM 5210 B]	Biochemical oxygen demand
Certified	Yes	NJ	WPP02.05000	NPW	Dissolved Oxygen Depletion	[BPA 200.7] [SM 3120 B]	Boron
Certified	Yes	N	WPP02.06000	NPW	ICP	[EPA 300.0]	Bromate
Certified	Yes	NJ	WPP02.06600	NPW	lon Chromatography	[EPA 300.0]	Bromide
Certified	Yes	NJ	WPP02.07100	NPW	Ion Chromatography	[BPA 200.7]	Calcium
Certified	Yes	NJ	WPP02.08000	NPW	Digestion, ICP ICP/MS	[EPA 200.8]	Calcium
Certified	Yes	NJ	WPP02.08050	NPW	Dissolved Oxygen Depletion, Nitrification	[SM 5210 B]	Carbonaceous BOD (CBOD)
Certified	Yes	ИJ	WPP02.09500	NPW	Inhibition		Chemical oxygen demand
a	Yes	NJ	WPP02.10000	NPW.	Titrimetric	[EPA 410.1 or .2 or .3] [SM 5220 C]	Chemical oxygen demand
Certified	Yes	נא	WPP02.10500	NPW	Spectrophotometric Manual/Auto	[SM 5220 D]	Chloride
Certified Certified	Yes	נא	WPP02.11500	NPW	Titrimetrie, Mercuric Nitrate	[EPA 325.3] [SM 4500-Cl C]	Chloride
Certified	Yes	נא	WPP02.12500	NPW	Colorimetric, Automated (Ferricyanide)	[EPA 325.1 OR .2]	Chloride
Certified	Yes	NJ	WPP02,12600	NPW	ion Chromatography	[EPA 300.0]	Chlorate
Certified	Yes	LN LN	WPP02.12700	NPW	ion Chromatography	[BPA 300.0]	Chlorite ·
Certified	Yes	NJ	WPP02,12800	NPW	lon Chromatography	[BPA 300.0]	Color
Certified	Yes	NJ	WPP02.13500	NPW	Colorimetric (Platinum-Cobalt)	[EPA 110.2] [SM 2120 B]	Cyanide
Certified	Yes	NJ	WPP02.14500	NPW .	Distillation, Titrimetric	[SM 4500-CN C, D]	Cyanide
Certified	Yes	ИJ	WPP02.15000	NPW	Distillation, Spectrophotometric (Manual)	[EPA 335.2] [SM 4500-CN C, E] [EPA 335.1] [SM 4500-CN G]	Cyanide - amenable to Ci2
Certified	Yes	נא	WPP02,16000	NPW	Manual Distillation, Titrimetr/Spectro	[BPA 340.2] [SM 4500-F B, C]	Fluoride
Certified	Yes	NJ	WPP02,16500	NPW	Distillation + Electrode, Manual	[EPA 340.1]	Fluorido
Applied	No	NJ	WPP02,17500	NPW	Distillation + Colorimetric(Spadus)	[EPA 300.0]	Fluoride
Certified	Yes	NJ	WPP02.18100	NPW	Ion Chromatography	[EPA 200.7]	Hardness - total as CaCO3
Certified	Yes	NJ	WPP02.20100	NPW	Ca + Mg Carbonates, ICP	[EPA 351.3] [SM 4500-N Org B or C]	Kjeldahi nitrogen - total
Certified	Yes	NJ	WPP02,20500	NPW	Digestion, Distillation, Titration Digestion, Distillation, Automated Phenate	[EPA 351.1]	Kjeldahi nitrogen - total
Certified	Yes	ИJ	WPP02.22000	NPW	Digestion, ICP	[EPA 200.7]	Magnesium
Cortified	Yes	M	WPP02.24000	NPW NPW	ICP/MS	[BPA 200,8]	Magnesium
Applied	No	NJ	WPP02,24050	NPW NPW	lon Chromatography	[BPA 300.0]	Nitrate
Certified	Ycs	NJ	WPP02.26100	DEW	inti Amatimospakal	•	



### National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP02 - Inorganic Parameters, Nutrients and Dema

	Eligible to Report	•	f				November Percedution
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ.	WPP02.27000	NPW	Cadmium Reduction, Automated	[BPA 353.2]	Nitrate - nitrite
Applied	No	NJ	WPP02.27500	NPW	Spectrophotometric Auto Hydrazine	[BPA 353.1]	Nitrate - nitrite
Certified	Yes	NJ	WPP02.28000	NPW	Spectrophotometric, Manual	[EPA 354.1] [8M 4500-NO2 B]	Nitrite
Certified	Yes	NJ	WPP02,28600	NPW	Ion Chromatography	[EPA 300,0]	Nitrite
Certified	Yes	NJ	WPP02,29000	NPW	Gmvimetrio	[EPA 413.1] [SM 5520 B]	Oil & grease - total recov
Certified	Yes	NJ	WPP02.29100	NPW	Gravimetrio, Hexane Extractable Material-LL	[EPA 1664A]	Oil & grease - hem-LL
Certified	Yes	NJ	WPP02.29150	NPW	Gravimetric, Hexane Extractable Material-SPE	[EPA 1664A]	Oil & grease - hem-SPE
Certified	Yes	NJ	WPP02.29200	NPW	Gmvimetric, Silica Gel Treated-Hom	[EPA 1664A]	Oil & grease - agt-non polar
Certified	Yes	NJ	WPP02.29250	NPW	Gravimetrio, Silica Gel Treated-Hem-SPB	[EPA 1664A]	Oil & grease - non polar
Certified	Yes	NJ	WPP02.30000	NPW	Combustion or Oxidation	[EPA 415.1]	Total organic carbon (TOC)
Certified	Yes	NJ	WPP02.30500	NPW	Total Kjeldahi-N Minus Ammonia-N	[BPA 351.1,2,.3,4 - 350.1 .2 .3] [SM 4500-NH3 B, C, E, F, G, H]	Organic nitrogen
Certified	Yes	NJ	WPP02.31500	NPW	Ascorbic Acid, Manual Single Reagent	[EPA 365.2] [8M 4500-P, E]	Orthophosphate
Certified	Yes	NJ	WPP02.32100	NPW	Ion Chromatography	[EPA 300.0]	Orthophosphate
Certified	Yes	NJ	WPP02,32500	NPW	Manual Distillation, Colorimetric 4AAP	[EPA 420,1]	Phenois
Certified	Yes	NJ	WPP02.34000	NPW	Persuifate Digestion + Manual	[EPA 365.2 + .3]	Phosphorus (total)
Suspended	No	NJ	WPP02,36500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Potassium
Applied	No	NJ	WPP02,36550	NPW	ICP/MS	[EPA 200.8]	Potassium
Certified	Yes	NJ	WPP02.38000	NPW	Gravimetric, 103-105 Degrees C	[EPA 160.3] [SM 2540 B]	Residue - total
Centified	Yes	NJ	WPP02.38500	NPW	Gravimetric, 180 Degrees C	[EPA 160.1] [SM 2540 C]	Residue - filterable (TDS)
Certified	Yes	NJ	WPP02.39000	NPW	Gravimetric, 103-105 Dagrees C, Post Washing	[EPA 160.2] [SM 2540 D]	Residue - nonfliterable (TSS)
Certified	Yes	NJ	WPP02,39500	NPW	Volumetric (Imhoff Cone) or Gravimetric	[EPA 160.5] [SM 2540 F]	Residue - settleable
Certified	Yes	NJ	WPP02,40000	NPW	Gravimetric, 550 Degrees C	[EPA 160.4]	Residue - volatile
Certified	Yes	NJ	WPP02.40100	NPW	Gravimetric, 500 Degrees C	[SM 2540 G]	Total, fixed, and volatile solids (SQAR)
Certified	Yes	NJ	WPP02.41000	NPW .	Hydrometric (Density Salinity Tables)	[SM 2520 C]	Salinity .
Centified	Yes	NJ	WPP02.42500	NPW	0.45u Filtration + ICP	[EPA 200.7] [SM 3120 B]	Silica - dissolved
Certified	Yes	NJ	WPP02,44000	NPW	Digestion, ICP	[BPA 200.7] [SM 3120 B]	Sodium
Cortified	Yes	NJ	WPP02,44050	NPW	ICP/MS	[EPA 200.8]	Sodium
Certified	Yos	NJ	WPP02.45500	NPW	Wheatstone Bridge	[EPA 120.1] [SM 2510 B]	Specific conductance
Certified	Yes	NJ	WPP02.46500	NPW	Turbidimetric	[EPA 375.4]	Sulfate
Certified	Yes	NJ	WPP02.47100	NPW	Ion Chromatography	[EPA 300.0]	Sulfate
Certified	Yes	NJ	WPP02.47500	NPW	Titrimetric, lodine	[EPA 376.1]	Sulfides

### National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP02 - Inorganic Parameters, Nutrients and Dema

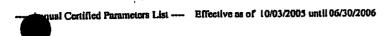
	Rigible to Report			Bastala	Technique Description	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix		1774 405 11 1014 5540 CT	Surfactants
Contified	Yes	NJ	WPP02.48500	NPW	Colorimetric (Methylene Blue)	[EPA 425.1] [SM 5540 C] [EPA 180.1] [SM 2130 B]	Turbidity
Certified	Yes	נא	WPP02.50000	NPW	Nephelometric	[SM 2710 B]	Specific oxygen uptake
Applied	No	NJ	WPP02.51000	NPW	Electrode	faut s. to sil	

Category: WPP03 — Analyze-Immediately Inorganic Parameters
Elicible to

Status         NJ Data         State         Code         Matrix         Technique Description         Applied         Applied         No.         MPP03.05000         NPW         Spectrophotometric, DPD         [EPA 330.5]         Chlorine           Certified         Yes         NJ         WPP03.07000         NPW         Winkler, Azide Modification         [EPA 360.2] [SM 4500-O C]         Oxygen (dissolved)           Certified         Yes         NJ         WPP03.08000         NPW         Electrode         [EPA 360.1] [SM 4500-O C]         Oxygen (dissolved)           Certified         Yes         NJ         WPP03.09000         NPW         Electrometric         [EPA 150.1] [SM 4500-H B]         pH           Applied         No         NJ         WPP03.12000         NPW         Titrimetric, Iodine-Iodate         [EPA 377.1] [SM 4500-SO3 B]         Sulfite - SO3           Certified         Yes         NJ         WPP03.14000         NPW         Themmometric         [EPA 170.1] [SM 2550 B]         Temperature		Report			***	T-shalana Dagadathan	Approved Method	Parameter Description
	Certified Certified Certified Certified Applied	Yes Yes Yes No	נא נא נא	WPP03.07000 WPP03.08000 WPP03.09000 WPP03.12000	NPW NPW NPW NPW	Winkler, Azide Modification Electrode Electrometric Titrimetric, lodino-lodate	[BPA 330.5] [BPA 360.2] [SM 4500-O C] [BPA 360.1] [SM 4500-O G] [BPA 150.1] [SM 4500-H B] [BPA 377.1] [SM 4500-SO3 B]	Oxygen (dissolved) Oxygen (dissolved) pH Sulfite - SO3

Category: WPP04 - Inorganic Parameters, Metals

	Eligible to Report		Cala	Matrix	Technique Description	Approved Method	Parameter Description
Status	NJ Data	State	Code			[EPA 200.2, Rev. 2.8, 5/94]	Sample preparation
Applied	No	NJ	WPP04.00800	NPW	Total Recoverable Elements		Aluminum
Certified	Yes	NJ	WPP04.02000	NPW	Digestion, ICP	[HPA 200.7] [SM 3120 B]	
		NJ	WPP04.02100	NPW	ICP/MS	[EPA 200.8]	Aluminum
Certified	Yes			NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Antimony
Certified	Yes	NJ .	WPP04.04500	•	iCP/MS	[EPA 200.8]	Antimony
Certified	Yes	N	WPP04.04600	NPW		[EPA 200.7] [SM 3120B]	Arsenic
Certified	Yes	NJ	WPP04.05600	NPW	Digestion, ICP	• • •	
Certified	Yes	NJ	WPP04.05700	NPW	ICP/MS	[EPA 200.8]	Arsenic
Certified	Yes	NJ	WPP04.08000	NPW	Digestion, ICP	[BPA 200.7] [SM 3120 B]	Barium
Centified	Yes	עא	WPP04.08200	NPW	ICP/MS	[EPA 200:8]	Berlum
		NJ	WPP04.11000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Beryllium
Certified	Yes			NPW	ICP/M8	[EPA 200.8]	Berylihum
Certified	Yes	NJ	WPP04.11100			[EPA 200.7] [SM 3120 B]	Cadmium
Certified	Yes	NJ	WPP04.13500	NPW	Digestion, ICP	ERLY WALL FAM SEED D	





### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP04 - Inorganic Parameters, Metals

	Eligible to Report				Martin State	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	[EPA 200.8]	Cadmium .
Certified	Yes	NJ	WPP04.13600	NPW	ICP/M8 0.45u Filter, Colorimetric DPC	[SM 3500-Cr D]	Chromium (VI)
Certified	Yes	NJ	WPP04.15000	NPW		[EPA 200.7] [SM 3120 B]	Chromium
Certified	Yes	, עו	WPP04.18000	NPW	Digestion, ICP	[EPA 200.8]	Chromium
Certified	Yes	NJ	WPP04,18100	NPW	ICP/MS	[EPA 200.7] [SM 3120B]	Cobalt
Certified	Yes	ŊJ	WPP04.19500	NPW	Digestion, ICP	[EPA 200.8]	Cobali
Certified	Yes	NJ	WPP04.19600	NPW	ICP/MS	[BFA 200.5] [BPA 200.7] [SM 3/120 B]	Copper
Certified	Yes	נא	WPP04,21500	NPW	Digestion, ICP	[EPA 200.8]	Copper
Certified	Yes	ľИ	WPP04.21600	NPW	ICP/MS	[EPA 200.5] [EPA 200.7] [SM 3120 B]	Iron
Certified	Yes	נא	WPP04,26500	NPW	Digestion, ICP		Iron
Applied	No	NJ	WPP04.26550	NPW	ICP/MS	[EPA 200.8]	Lead
Certified	Yes	NJ	WPP04.28000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Lead
Certified	Yes	NJ	WPP04.28100	NPW	ICP/MS	[EPA 200.8]	Manganeso
Certified	Yes	NJ	WPP04.31000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Manganese
Certified	Yes	NJ	WPP04.31100	NPW	ICP/MS	[EPA 200.8]	Mercury
Certified	Yes	NJ	WPP04.33000	NPW	Manual Cold Vapor	[EPA 245.1] [SM 3112 B]	Mercury
Applied	No	NJ	WPP04.33550	NPW	Digestion, ICP/MS (Incinerator)	[EPA 200.8]	•
Certified	Yes	NJ	WPP04.35000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Molybdenum
Certified	Yes	NJ .	WPP04.35200	NPW	ICP/M5	[EPA 200.8]	Molybdonum
Certified	Yes	NJ	WPP04.37500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Nickel
Certified	Yes	נא	WPP04.37600	NPW	ICP/MS	[EPA 200.8]	Nickel
Certified	Yes	NJ	WPP04.45500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Scienium
Certified	Yes	NJ	WPP04.45600	NPW	ICP/MS	[EPA 200.8]	· Selenium
Certified	Yes	NJ	WPP04.48000	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Silver
Certified	Yes	NJ	WPP04.48200	NPW	ICPMS	[EPA 200.8]	Bilver
Certified	Yes	NJ	WPP04.50000	NPW	Digestion, ICP	[BPA 200.7] [SM 3120 B]	Thallium
Certified	Yes	NJ	WPP04.50100	NPW	ICP/MS	[EPA 200.8]	Thallium
Certified	Yes	NJ	WPP04.51100	NPW	Digestion, ICP	[HPA 200.7]	Tin ·
Applied	No	NJ	WPP04.51200	NPW	ICP/MS	[EPA 200.8]	Tin
Applied	No	NJ	WPP04.52050	NPW	Digestion, ICP	(BPA 200.7)	Titanium
Applied	No	ŊJ	WPP04.52070	NPW	ICP/MS	[BPA 200.8]	Titanium
Centified	Yes	NJ <sub>.</sub>	WPP04.52300	NPW	ICP/MS	[EPA 200.8]	Thorium
Applied	No	NJ	WPP04.52400	NPW	ICP/MS	[BPA 200.8]	Tungsten

### National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP04 - Inorganic Parameters, Metals

, ,		
	Eligible	to
	Report	

	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status	140 Data	State				[EPA 200.8]	Uranium
Certified	Yes	NJ	WPP04.52500	NPW	ICP/MS	[EPA 200.7] [SM 3120 B]	Vanadium
Certified	Yes	NJ	WPP04.54000	NPW	Digestion, ICP	·	Vanadium
Certified	Yes	NJ	WPP04.54100	NPW	ICP/M8	[EPA 200.8]	
Certified	Yes	NJ	WPP04.56500	NPW	Digestion, ICP	[EPA 200.7] [SM 3120 B]	Zinc
Certified	Yes	NJ	WPP04.56600	NPW	ICP/MS	[BPA 200.8]	Zinc

Category: WPP05 - Organic Parameters, Chromatography

Eligible to
Danamet

	Report			54.4.3	Technique Description	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix		[BPA 601] [SM 6230 B]	Bromodichloromethane
Certified	Yes	NJ	WPP05.01010	NPW	Purge & Trap, GC (HECD)	•	Bromoform
Certified	Yes	NJ	WPP05.01020	· NPW	Purge & Trap, GC (HBCD)	[EPA 601] [SM 6230 B]	Bromomethane
Certified	Yes	NJ	WPP05.01030	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Carbon tetrachloride
Certified	Yes	NJ	WPP05.01040	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	
Certified	Yes	NJ	WPP05.01060	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Chloroethane
Certified	Yes	נא	WPP05.01070	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Chloroethyl vinyl ether (2-)
Certified	Yes	NJ .	WPP05.01080	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Chloroform
		NJ	WPP05.01090	NPW	Purge & Trap, GC (HBCD)	[EPA 601] [SM 6230 B]	Chloromethane
Certifled	Yes		WPP05.01100	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dibromochloromethane
Certified	Yes	NJ		NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichlorobenzene (1,2-)
Certified	Yes	נא	WPP05.01110	NPW	Purge & Trap, GC (HECD)	[BPA 601] [SM 6230 B]	Dichlerobenzene (1,3-)
Centified	Yes	NJ	WPP05,01120		Purge & Trap, GC (HBCD)	[EPA 601] [SM 6230 B]	Dichlorobenzene (1,4-)
Certified	Yes	NJ	WPP05,01130	NPW		[EPA 601] [SM 6230 B]	Dichlorodifluoromethane
Certified	Yes	ŊJ	WPP05.01140	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethane (1,1-)
Centified	Yes	NJ	WPP05,01150	NPW	Purge & Trap, GC (HECD)	•	Dichloroethane (1,2-)
Certified	Yes	NJ	WPP05.01160	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethene (1,1-)
Certified	Yes	NJ	WPP05.01170	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloroethene (trans-1,2-)
Certified	Yes	NJ	WPP05.01180	NPW	Purya & Trap, GC (HECD)	[BPA 601] [SM 6230 B]	Dichloropropano (1,2-)
Certified	Yes	M	WPP05.01190	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloropropene (cis-1,3-)
Certified	Yes	NJ	WPP05.01200	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Dichloropropene (trans-1,3-)
Certified	Yes	נא	WPP05.01210	NPW	Purge & Trap, GC (HECD)	[BPA 601] [SM 6230 B]	Methylene chloride (Dichloromethane)
Certified	Yes	NJ	WPP05.01220	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Month into process (Standardina)





#### National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP05 -- Organic Parameters, Chromatography

Eligible t	D
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Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP05.01230	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Tetrachloroethane (1,1,2,2-)
Certified	Yes	NJ	WPP05.01240	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Tetrachlorgethens
Certified	Yes	NJ	WPP05.01250	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Trichloroethane (1,1,1-)
Certified	Yes	נא	WPP05.01260	NPW	Purge & Trap, GC (HBCD)	[EPA 601] [SM 6230 B]	Trichloroethane (1,1,2-)
Certified	Yes	NJ .	WPP05.01270	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Trichioroethene
Certified	Yes	NJ	WPP05.01280	NPW	Purge & Trap, GC (HECD)	[EPA 601] [SM 6230 B]	Trichlorofluoromethane
Certified	Yes	NJ	WPP05.01290	NPW	Purge & Trap, GC (HBCD)	[EPA 601] [SM 6230 B]	Vinyl chloride
Certified	Yes	NJ	WPP05.02010	NPW	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	Benzene
Certified	Yes		WPP05.02030	NPW		[EPA 602] [SM 6220 B]	Dichlorobenzene (1,2-)
Certified	Yes Yes	NJ	WPP05.02040	. NPW	Purge & Trap, GC (PID)		Dichlorobenzene (1,3-)
		NJ		NPW	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	Dichlorobeazene (1,4-)
Certified	Yes	NJ	WPP05.02050	NPW	Purge & Trep, GC (PID)	[EPA 602] [SM 6220 B]	Ethylbenzene
Certified	Yes	NJ	WPP05.02060	• •	Purge & Trap, GC (PID)	[EPA 602] [SM 6220 B]	
Certified	Yes	ИJ	WPP05.02062	NPW	Purge & Trap, GC (PID)	[EPA 602]	Methyl tert-butyl ether
Centified	Yes	NJ	WPP05.02064	NPW	Purge & Trap, GC (PID)	[EPA 602]	Tert-butyl alcohol
Certified	Yes	NJ	WPP05.02070	NPW	Purgo & Trap, GC (PID)	[EPA 602]	Toluene
Certified	Yes	וא	WPP05.02080	NPW	Purge & Trap, GC (PID)	[EPA 602]	Xylenes (total)
Certified	Yes	נא	WPP05.09010	NPW	Extract/GC (ECD)	[EPA 608]	Aldrin
Certified	Yes	וא	WPP05.09020	NPW	Extract/GC (ECD)	[EPA 608]	Alpha BHC
Certified	Yes	NJ	WPP05,09030	NPW	Extract/GC (ECD)	[EPA 608]	Beta BHC
Certified	Yes	NJ	WPP05.09040	NPW	Extract/GC (ECD)	[EPA 608]	Delta BHC
Certified	Yes	NJ	WPP05.09050	NPW	Extract/GC (ECD)	[BPA 608]	Lindane (gamma BHC)
Certified	Yes	NJ	WPP05.09060,	NPW	Extract/GC (ECD)	[EPA 608] .	Chlordane
Certified	Yes	NJ	WPP05.09070	NPW	Extract/OC (ECD)	[EPA 608]	DDD (4,4'-)
Certified	Yes	NJ	WPP05.09080	NPW	Extract/GC (ECD)	[EPA 608]	DDE (4,4'-)
Certified	Yes	NJ	WPP05.09090	NPW	Extract/GC (ECD)	[EPA 608]	DDT (4,4'-)
Certified	Yes	NJ	WPP05.09100	NPW	Extract/GC (ECD)	[EPA 608]	Dieldrin
Certified	Yes	NJ	WPP05.09110	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan I
Certified	Yes	נא	WPP05.09120	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan II
Certified	Yes	NJ	WPP05.09130	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan sulfate
Certified	Yes	NJ	WPP05.09140	NPW	Extract/GC (ECD)	[EPA 608]	<b>Endrin</b>
Certified	Yes	NJ	WPP05.09150	NPW	Extract/GC (ECD)	[EPA 608]	Endrin aldehyde
Certified	Yes	NJ	WPP05.09160	NPW	Extract/GC (ECD)	[EPA 608]	<b>Endrin ketone</b>

## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

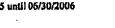
Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP05 - Organic Parameters, Chromatography

g,-	Eligible to	)	•	• • •			
64-4	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status	Yes	NJ	WPP05.09170	NPW	Extract/GC (ECD)	[EPA 608]	Heptachlor
Certified		NJ	WPF05.09180	NPW	Extract/GC (ECD)	[HPA 608]	Heptachlor epoxide
Certified	Yes	נא	WPP05.09190	NPW	Extract/GC (BCD)	[EPA 608]	Methoxychlor
Certified	Yes		WPP05.09200	NPW	Extract/GC (ECD)	[EPA 608]	Toxaphene
Certified	Yes	NJ	WPP05.11010	NPW	Extract/GC (ECD)	[BPA 608]	PCB 1016
Certified	Yes	NJ	WPP05.11010	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1221
Certified	Yes	NJ		NPW	Extract/GC (ECD)	[EPA 608]	PCB 1232
Certified	Yes	ИJ	WPP05.11030	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1242
Certified	Yes	NJ	WPP05.11040	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1248
Certified	Yes	נא	WPP05.11050		Extract/GC (ECD)	[EPA 608]	PCB 1254
Certified	Yes	NJ	WPP05.11060	NPW		[EPA 608]	PCB 1260
Certified	Yes	נא	WPP05.11070	, NPW	Extract/GC (ECD)  Extract/HPLC (UV/Fluorescence)	[EPA 610] [SM 6440 B]	Acenaphthene
Applied	No	NJ	WPP05,13010	NPW		[EPA 610] [SM 6440 B]	Acenaphthylene
Applied	No	M	WPP05.13020	NPW	Extract/HPLC (UV/Fluorescence) Extract/HPLC (UV/Fluorescence)	[EPA 610] [SM 6440 B]	Anthrocene
Applied	No	NJ	WPP05.13030	NPW		[BPA 610] [SM 6440 B]	Benzo(a)anthracene
Applied	No	NJ	WPP05.13040	NPW	Extract/HPLC (UV/Pluorescence)	[EPA 610] [SM 6440 B]	Benzo(a)pyrene
Applied	No	NJ	WPP05.13050	NPW	Extract/HPLC (UV/Fluorescence)	[BPA 610] [SM 6440 B]	Benzo(b) fluoranthene
Applied	No	NJ	WPP05.13060	NPW	Extract/HPLC (UV/Pluorescence)	[BPA 610] [SM 6440 B]	Benzo(ghi)porylene
Applied	No	NJ	WPP05.13070	NPW	Extract/HPLC (UV/Phorescence)	[EPA 610] [SM 6440 B]	Benzo(k)fluoranthene
Applied	No	NJ	WPP05.13080	NPW	Extract/HPLC (UV/Fluorescence)		Chrysene
Applied	No	NJ	WPP05.13090	NPW	Extract/HPLC (UV/Pluorescence)	[EPA 610] [SM 6440 B]	Dibenzo(a,h)anthracene
Applied	No	NJ	WPP05.13100	NPW	Extract/HPLC (UV/Pluorescence)	[BPA 610] [SM 6440 B]	Fluoranthene
Applied	No	NJ	WPP05.13110	NPW	Extract/HPLC (UV/Fluorescence)	[BPA 610] [SM 6440 B]	Fluorene
Applied	No	NJ	WPP05.13120	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610] [SM 6440 B]	Indeno(1,2,3-cd)pyrene
Applied	No	NJ	WPP05.13130	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610] [SM 6440 B]	***
Applied	No	NJ	WPP05.13140	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610] [SM 6440 B]	Naphthalene
Applied	No	NJ	WPP05.13150	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610] [SM 6440 B]	Phenanthrene
Applied	No	NJ	WPP05.13160	NPW	Extract/HPLC (UV/Fluorescence)	[BPA 610] [SM 6440 B]	Pyrene Acenaphthene
Applied	No	NJ	WPP05.14010	NPW	Extraot/GC (FID)	[BPA 610] [ASTM D4657-92] [SM 6440 B]	Aconaphthylene
Applied	No	NJ	WPP05.14020	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B] [EPA 610] [ASTM D4657-92] [SM 6440 B]	Anthracene
Applied	No	NJ	WPP05.14030	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	Benzo(a)anthracens
Applied	No	NJ	WPP05.14040	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [8M 6440 B]	Benzo(a)pyrene
Applied	No	NJ	WPP05.14050	NPW	Extract/GC (FID)	ום סדיים ומם ומביו נטוים ומו פאן נטוט איזםן	matentalk) min





### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006



284 SHEFFIELD ST Mountainside, NJ 07092



#### Category: WPP05 -- Organic Parameters, Chromatography

Eligible to Report NJ Data State Code Matri:

Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	WPP05,14060	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	Benzo(b)fluoranthene
Applied	No	NJ	WPP05.14070	NPW	Extract/GC (FID)	[BPA 610] [ASTM D4657-92] [SM 6440 B]	Benzo(ghi)peryiene
Applied	No	NJ	WPP05.14080	NPW	Extract/GC (FID)	[BPA 610] [ASTM D4657-92] [SM 6440 B]	Benzo(k)fluoranthene
Applied	No	NJ	WPP05.14090	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	Chrysene
Applied	No	N	WPP05.14100	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	Dibenzo(e,h)anthracene
Applied	No	NJ	WPP05.14110	NPW	Extract/GC (FID)	[HPA 610] [ASTM D4657-92] [SM 6440 B]	Pluoranthene
Applied	No	NJ	WPP05.14120	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	· Pluorene
Applied	No	N	WPP05.14130	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	Indeno(1,2,3-cd)pyrene
Applied	No	NJ	WPP05.14140	NPW.	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	Naphthalene
Applied	No	N	WPP05.14150	NPW	Extract/GC (FID)	[EPA 610] [ASTM D4657-92] [SM 6440 B]	Phenanthrene
Applied	No	NJ	WPP05.14160	NPW	Bxtract/GC (FID)	[HPA 610] [ASTM D4657-92] [SM 6440 B]	Pyrene
Applied	No	NJ	WPP05.30000	NPW	Extraction, OC, FID	[OTHER NJ-OQA-QAM-025, Rev. 5]	Petroleum Organics

#### Category: WPP06 - Organic Parameters, Chromatography/MS

Eligible to

•		Report						
	Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
	Certified	Yes	NJ	WPP06.02010	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Benzene
	Certified	Yes	NJ	WPP06.02020	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Bromodichloromethana
	Certified	Yes	NJ.	WPP06.02030	NPW	GC/MS, P & T, Capillary Column	[BPA 624] [8M 6210 B]	Bromoform
	Certified	Yes	NJ	WPP06.02040	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Bromomethane
	Certified	Yes	NJ	WPP06.02050	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Carbon tetrachloride
	Certified	Yes	NJ	WPP06.02060	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Chlorobenzene
	Certified	Yes	NJ	WPP06.02070	NPW	GC/MS, P & T, Capillary Column	[BPA 624] [SM 6210 B]	Chloroethane
	Certified	Yes	NJ	WPP06.02080	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Chloroethyl vinyl ether (2-)
	Certified	Yes	NJ	WPP06.02090	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Chloroform
	Certified	Yes	NJ	WPP06.02100	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Chloromethane
	Certified	Yes	NJ	WPP06,02110	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dibromochioromethane
	Certified	Yes	NJ	WPP06.02120	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichlorobenzene (1,2-)
	Certified	Yes	NJ	WPP06.02130	NPW	GC/MS, P & T, Capillary Column	[BPA 624] [SM 6210 B]	Diohlorobenzene (1,3-)
	Certified	Yes	NJ	WPP06.02140	NPW	GC/MS, P & T, Capillary Column	[BPA 624] [SM 6210 B]	Dichlorobenzene (1,4-)

### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

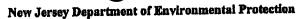
284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 - Organic Parameters, Chromatography/MS

	Eligible to Report NJ Data		<b>6.1.</b>	Matrix	Technique Description	Approved Method	Parameter Description
atus		State	Code	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloroethane (1,1-)
ertified	Yes	NJ	WPP06.02150			[BPA 624] [SM 6210 B]	Dichloroethane (1,2-)
nified	Yes	NJ	WPP06.02160	NPW	GC/MS, P & T, Capillary Column	[BPA 624] [SM 6210 B]	Dichloroethene (1,1-)
rtified	Yes	NJ	WPP06.02170	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloroethene (trans-1,2-)
tified	Yes	NJ	WPP06.02180	NPW	GC/MS, P & T, Capillary Column		Dichloropropane (1,2-)
tilied	Yes	NJ	WPP06.02190	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloropropene (cis-1,3-)
tified	Yes	NJ	WPP06.02200	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Dichloropropene (trans-1,3-)
tified	Yes	NJ	WPP06.02210	NPW	GC/MS, P & T, Capillary Column	[BPA 624] [SM 6210 B]	• • •
tified	Yes	NJ	WPP06.02220	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Ethylbenzene
tified	Yes	NJ	WPP06,02230	NPW	GC/MS, P & T, Capillary Column	[HPA 624] [SM 6210 B]	Methylene chloride (Dichloromethane)
tified	Yes	NJ	WPP06.02232	NPW	GC/MS, P & T, Capillary Column	[BPA 624]	Methyl tert-butyl ether
lified	Yes	NJ	WPP06.02234	NPW	GC/MS, P & T, Capillary Column	[BPA 624]	Tert-butyl alcohol
tified	Yes	NJ	WPP06.02238	NPW	GC/MS, P & T, Capillary Column	[EPA 624]-	Styrenie
ified	Yes	NJ	WPP06.02240	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Tetrachloroethane (1,1,2,2-)
ified	Yes	NJ	WPP06.02250	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Tetrachioroethene
tified	Yes	NJ	WPP06.02260	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Toluene
Lified	Yes	NJ	WPP06.02270	NPW	GC/MS, P & T, Capillary Column	[BPA 624] [SM 6210 B]	Trichloroethane (1,1,1-)
Lified	Yes	נא	WPP06.02280	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Trishloroethane (1,1,2-)
tified	Yes	NJ	WPP06.02290	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Trishloroethene
tified	Yes	NJ	WPP06.02300	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	Trichlorofluoromethane
dified	Yes	NJ	WPP06.02310	NPW	GC/MS, P & T, Capillary Column	[EPA 624] [SM 6210 B]	. Vinyl chloride
	Yes	נא	WPP06.02312	NPW	GC/MS, P & T, Capillary Column	[BPA 624]	Xylones (total)
tified tified	Yes	N	WPP06.03010	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Acenaphthene
unea Ufiod	Yes	א	WPP06.03020	. NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Acenaphthylene
unoa tilied	Yes	מא	WPP06.03030	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Anthraceno
rified	Yes.	N	WPP06.03040	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(a)anthracene
		נא	WPP06.03050	NPW	Extract, QC/MS	[EPA 625] [SM 6410 B]	Benzo(b)fluoranthene
lified	Yes	אן נא	WPP06.03060	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(k)fluoranthene
tified tified	Yes Yes	NJ NJ	WPP06.03070	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Benzo(a)pyrene
unea Unea	Yes	NJ LN	WPP06.03070	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzo(ghi)perylene
tified	Yes	NJ	WPP06.03090	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Butyi benzyi phihalate
tified	Yes	NJ	WPP06.03100	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-chloroethyl) ether
nified	Yes	NJ	WPP06.03110	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-chloroethoxy) methane





### National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 - Organic Parameters, Chromatography/MS

	Eligible to Report	)					Down and an Downson of the se
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	WPP06.03120	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-ethylhexyl) phthalate
Certified	Yes	NJ	WPP06.03130	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bis (2-chloroisopropyl) ether
Certified	Yes	NJ	WPP06.03140	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Bromophenyl-phenyl ether (4-)
Certified	Yes	ŊJ	WPP06.03150 ·	NPW	Extract, OC/MS	[EPA 625] [SM 6410 B]	Chloronaphthalene (2-)
Certified	Yes	NJ	WPP06.03160	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Chlorophenyl-phenyl ether (4-)
Certified	Yes	נא	WPP06.03170	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Chrysene
Certified	Yes	NJ	WPP06.03180	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dibenzo(a,h)anthracene
Certified	Yes	NJ	WPP06.03190	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Di-n-butyl phthalate
	Yes	נא	WPP06.03200	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dichlorobenzene (1,3-)
Certified Certified	Yes	נא	WPP06.03210	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dichlorobenzone (1,2-)
Centified	Yes	נא	WPP06.03220	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Dichlorobenzene (1,4-)
Certified	Yes	NJ	WPP06.03230	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Dichlorobenzidine (3,3'-)
	Yes	אן נא	WPP06.03240	NPW	Extraci, GC/MS	[EPA 625] [SM 6410 B]	Dicthyl phthalate
Centified	res Yes	וא ואו	WPP06.03250	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dimethyl phthalate
Certified	Yes		WPP06.03260	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrololuene (2,4-)
Certified	res Yes	NJ. NJ	WPP06.03270	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrotoluene (2,6-)
Certified	Yes	NJ	WPP06.03280	NPW	Extract, GC/MS	[EPA 625] [8M 6410 B]	Di-n-octyi phthalate
Certified			WPP06.03290	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Fluoranthono
Certified	Yes	NJ	WPP06.03300	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Fluorene
Centified	Yes	NJ	WPP06.03310	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexachlorobonzone
Certified	Yes	NJ	WPP06.03320	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexachlorobutadiene (1,3-)
Certified	Yes Yes	NI IN	WPP06.03330	NPW	Extract, GC/MS	[BPA 625] [8M 6410 B]	Hexachloroethane
Certified		NJ	WPP06.03340	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Indeno(1,2,3-ed)pyrene
Certified	Yes		WPP06.03350	NPW	Extract, GC/MS	[EPA 625] [SM 6410B]	Isophorone
Certified	Yes	NJ		NPW	Extract, GC/MS	[EPA 625]	Methylnaphthalene (2-)
Certified	Yes	NJ	WPP06.03358	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Naphthalene
Certified	Yes	נא	WPP06.03360	NPW ·	Extract, GC/MS	[BPA 625]	Chloroaniline (4-)
Certified Certified	Yes Yes	NJ	WPP06.03366 WPP <b>0</b> 6.03367	NPW	Extract, GC/MS	[BPA 625]	Nitroaniline (2-)
Certified	Yes	NJ	WPP06.03368	NPW	Extract, GC/MS	[BPA 625]	Nitroaniline (3-)
Certified	Yes	NJ	WPP06.03369	NPW	Extract, GC/MS	[BPA 625]	Nitroaniline (4-)
Certified	Yes	NJ	WPP06.03370	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Nitrobenzene
Certified	Yes	NJ	WPP06.03380	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	N-Nitroso-di-n-propylamine

## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP0	6 — Organic Parameters	, Chromatography/MS
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	Eligible to						•
	Report NJ Data	<b></b>	0-4-	Matrix	Technique Description	Approved Method	Parameter Description
Status		State	Code	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Phenanthrene
Certified	Yes	NJ	WPP06.03390	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Pyrene
Certified	Yes	NJ	WPP06,03400		Extract, GC/MS	[EPA 625] [SM 6410 B]	Trichlorobenzene (1,2,4-)
Certified	Yes	NJ	WPP06.03410	NPW	Extract, GC/MS	[BPA 625]	Methylphenol (2-)
Certified	Yes	ИJ	WPP06.03417	NPW	Extract, GC/MS	[EPA 625]	Methylphenol (4-)
Certified	Yes	NJ	WPP06.03418	NPW		[EPA 625] [SM 6410 B]	Methyl phenol (4-chloro-3-)
Certified	Yes	NJ	WPP06.03420	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Chiorophenol (2-)
Certified	Yes	NJ	WPP06.03430	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dichiorophenol (2,4-)
Certified	Yes	NJ	WPP06.03440	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dimethylphenol (2,4-)
Certified	Yes	NJ	WPP06.03450	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrophenol (2,4-)
Certified	Yes	NJ	WPP06.03460	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dinitrophenol (2-methyl-4,6-)
Certified	Yes	NJ	WPP06.03470	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Nitrophenol (2-)
Certified	Yes	NJ	WPP06.03480	NPW ·	Extract, GC/MS		Nitrophenol (4-)
Certified	Yes	NJ	WPP06.03490	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Pentachiorophenol
Certified	Yes	NJ	WPP06.03500	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Phenol
Certified	Yes	NJ	WPP06.03510	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Trichlorophenol (2,4,5-)
Certifled	Yes	NJ	WPP06.03518	NPW	Extract, GC/MS	[BPA 625]	Trichlorophenoi (2,4,6-)
Certified	Yes	NJ	WPP06.03520	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzoic acid
Certified	Yes	NJ	WPP06.03530	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Methylphenol (4-)
Certified	Yes	NJ	WPP06.03540	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Acetophenone
Centified	Yes	NJ	WPP06.03550	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Alpha - terpincol
Certified	Yes	NJ	WPP06.03560	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Aniline
Certified	Yes	NJ	WPP06.03570	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Benzidine
Certified	Yes	NJ .	WPP06.03580	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	
Certifled	Yes	NJ	WPP06.03590	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Carbazole
Certified	Yes	NJ LIN	WPP06.03600	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Dichloroaniline (2,3-)
Centified	Yes	IJ	WPP06.03610	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Methylphenol (2-)
Certified	Yes	נא	WPP06.03620	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Decane (n-)
Certified	Yes	נא	WPP06.03630	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Docusano (n-)
Certified	Yes	NJ	WPP06,03640	NPW	Extract, GC/M8	[EPA 625] [SM 6410 B]	Dodecane (n-)
Certified	Yes	NJ	WPP06.03650	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Ricosane (n-)
Certified	Yes	NJ	WPP06.03660	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexachlorocyclopentadiene
Certified	Yes	NJ	WPP06.03670	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Hexadecane (n-)
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# National Environmental Laboratory Accreditation Program ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 - Organic Parameters, Chromatography/MS

	Eligible to Report NJ Data	,	arameters, Carom		Parameter Description		
Status		State	Code	Matrix	Technique Description	Approved Method	N-Nitrosodimethylamine
Certified	Yes	נא	WPP06.03680	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	N-Nitrosodiphenylamine
Certified	Yes	NJ	WPP06.03690	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Octadecane (n-)
Certified	Ycs	NJ	WPP06.03700	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Tetradecano (n-)
Certified	Yes	NJ	WPP06.03710	NPW	Extract, GC/MS	[EPA 625] [SM 6410 B]	Pyridine
Certified	Yes	NJ	WPP06.03720	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	
crtified	Yes	NJ	WPP06.03730	NPW	Extract, GC/MS	[BPA 625] [SM 6410 B]	Methylphenanthrene (1-)
pplied	No	NJ	WPP06.08001	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Chlorobiphenyl (2-) (PCB 1)
pplied	No	NJ	WPP06.08002	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Chlorobiphenyl (3-) (PCB 2)
pplied	No	NJ	WPP06.08003	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Chlorobiphenyl (4-) (PCB 3)
pplicd	No	NJ	WPP06.08004	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,2'-) (PCB 4)
pplied	No	NJ	WPP06.08005	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,3-) (PCB 5)
pplied	No	NJ	WPP06.08006	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,3'-) (PCB 6)
plied	No	NJ	WPP06.08007	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,4-) (PCB 7)
plied	No	NJ	WPP06.08008	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,4'-) (PCB 8)
plied	No	NJ	WPP06.08009	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyi (2,5-) (PCB 9)
plied	No	NJ	WPP06.08010 .	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,6-) (PCB 10)
plied	No	NJ	WPP06.08011	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichloroblphenyl (3,3'-) (PCB 11)
plied	No	NJ"	WPP06.08012	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (3,4-) (PCB 12)
plied	No	NJ	WPP06.08013	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphonyl (3,4'-) (PCB 13)
plied	No	N	WPP06.08014	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (3,5-) (PCB 14)
plied	No	NJ	WPP06.08015	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (4,4'-) (PCB 15)
plied	No	NJ	WPP06.08016	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyi (2,2',3-) (PCB 16)
plied	No	NJ	WPP06.08017	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyi (2,2',4-) (PCB 17)
plied	No	NJ	WPP06.08018	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyi (2,2',5-) (PCB 18)
plied	No	NJ	WPP06.08019	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyl (2,2',6-) (PCB 19)
plied	No	נא	WPP06.08020	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyl (2,3,3'-) (PCB 20)
plied	No	NJ	WPP06.08021	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyi (2,3,4-) (PCB 21)
plied	No	NJ	WPP06.08022	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichiorobiphenyl (2,3,4'-) (PCB 22)
plied	No	NJ	WPP06.08023	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3,5-) (PCB 23)
plied	No	NJ	WPP06.08024	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyl (2,3,6-) (PCB 24)
piled	No	NJ	WPP06.08025	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyl (2,3',4-) (PCB 25)
pplied	No	NJ	WPP06.08026	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Trichlorobiphenyl (2,3',5-) (PCB 26)

### National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 - Organic Parameters, Chromatography/MS

	Eligible to Report		<b>.</b> .	Bill m Audion	Technique Description	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3',6-) (PCB 27)
Applied	No	NJ	WPP06.08027	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,4,4'-) (PCB 28)
<b>Applied</b>	No	NJ	WPP06.08028	NPW		[EPA 1668A]	Trichlorobiphenyl (2,4,5-) (PCB 29)
Applied	No	NJ	WPP06.08029	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyi (2,4,6-) (PCB 30)
Applied	No	NJ	WPP06.08030	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,4',5-) (PCB 31)
Applied	No	N	WPP06.08031	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,4',6-) (PCB 32)
Applied	No	NJ	WPP06.08032	NPW	Extraction, SIM, GC/MS	•	Trichlorobiphenyl (2,3',4'-) (PCB 33)
Applied	No	NJ	WPP06.08033	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3',5'-) (PCB 34)
Applied	No	NJ	WPP06.08034	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,3',4-) (PCB 35)
Applied	No	NJ	WPP06,08035	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,3',5-) (PCB 36)
Applied	No	NJ	WPP06.08036	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	* * * * * * * * * * * * * * * * * * * *
Applied	No	NJ	WPP06.08037	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,4,4'-) (PCB 37) Trichlorobiphenyl (3,4,5-) (PCB 38)
Applied	No	NJ	WPP06.08038	NPW	Extraction, 81M, GC/MS	[EPA 1668A]	
Applied	No	NJ	WPP06.08039	NPW	Extraction, SIM, GC/MS	[ABA 1668A]	. Trichlorobiphenyl (3,4',5-) (PCB 39)
Applied	No	NJ	WPP06,08040	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,2',3,3'-) (PCB 40)
Applied	No	NJ	WPP06.08041	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,2',3,4-) (PCB 41)
Applied	No	NJ	WPP06.08042	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,2',3,4'-) (PCB 42)
Applied	No	ИJ	WPP06.08043	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyi (2,2',3,5-) (PCB 43)
Applied	No	NJ	WPP06.08044	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachiorobiphanyi (2,2',3,5'-) (PCB 44)
Applied	No	NJ LN	WPP06.08045	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',3,6-) (PCB 45)
Applied	No	NJ	WPP06.08046	NPW	Extraction, SIM, GC/MS.	[EPA 1668A]	Tetrachlorobiphenyl (2,2',3,6'-) (PCB 46)
Applied	No	ָנא .	WPP06.08047	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,4'-) (PCB 47)
	No	NJ	WPP06.08048	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,5-) (PCB 48)
Applied	No	NJ	WPP06.08049	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,5'-) (PCB 49)
Applied		NJ	WPP06.08050	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,6-) (PCB 50)
Applied	No	N1	WPP06.08051	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,2',4,6'-) (PCB 51)
Applied	No	נא נא	WPP06,08052	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',5,5'-) (PCB 52)
Applied	No	NJ NJ	WPP06.08053	· NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyi (2,2',5,6'-) (PCB 53)
Applied	No No	נא נא	WPP06.08054	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',6,6'-) (PCB 54)
Applied	No No	NJ	WPP06.08055	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetruchlorobiphenyl (2,3,3',4-) (PCB 55)
Applied	No No	NJ	WPP06.08056	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,3,3',4'-) (PCB 56)
Applied	No	NJ	WPP06.08057	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,3',5-) (PCB 57)
Applied Applied	No No	LN LN	WPP06.08058	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachiorobiphenyi (2,3,3',5'-) (PCB 58)







## National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

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Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 -- Organic Parameters, Chromatography/MS

Sanara	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Methed	Parameter Description
Status Applied	No	NJ	WPP06.08059	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,3,3',6-) (PCB 59)
Applied Applied	No No	NJ	WPP06.08060	NPW .	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyi (2,3,4,4'-) (PCB 60)
Applied	No	NJ	WPP06.08061	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,4,5-) (PCB 61)
Applied	No	נא	WPP06.08062	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,4,6-) (PCB 62)
Applied	No	NJ	WPP06.08063	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,4',5-) (PCB 63)
Applied	No	NJ	WPP06.08064	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,4',6-) (PCB 64)
Applied	No	NJ	WPP06.08065	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,5,6-) (PCB 65)
Applied	No	NJ	WPP06.08066	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyi (2,3',4,4'-) (PCB 66)
-4-	No	NJ	WPP06.08067	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,3',4,5-) (PCB 67)
Applied	No	נא	WPP06.08068	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachiorobiphenyl (2,3',4,5'-) (PCB 68)
Applied	No	NJ	WPP06.08069	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,3',4,6-) (PCB 69)
Applied			WPP06.08070	NPW	Extraction, StM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',4',5-) (PCB 70)
Applied	No	NJ	WPP06.08071	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachiorobiphenyl (2,3',4',6-) (PCB 71)
Applied	No No	NJ NJ	WPP06.08071	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (2,3',5,5'-) (PCB 72)
Applied			WPP06.08073	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',5',6-) (PCB 73)
Applied	No	NJ		NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,4,4',5-) (PCB 74)
Applied	No	NJ	WPP06.08074	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,4,4',6-) (PCB 75)
Applied	No	NJ '	WPP06.08075	•	• •	[EPA 1668A]	Tetrachlorobiphenyi (2,3',4',5'-) (PCB 76)
Applied	No	NJ	WPP06.08076	NPW NPW	Extraction, SIM, GC/MS Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (3,3',4,4'-) (PCB 77)
Applied .	No	NJ	WPP06.08077 WPP06.08078	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (3,3',4,5-) (PCB 78)
Applied	No	NJ		NPW		[EPA 1668A]	Tetrachlorobiphenyl (3,3',4,5'-) (PCB 79)
Applied	No	NJ	WPP06.08079		Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (3,3',5,5'-) (PCB 80)
Applied	No	NJ	WPP06.08080	NPW	Extraction, SIM, GC/MS Extraction, SIM, GC/MS	[BPA 1668A]	Tetrachlorobiphenyl (3,4,4',5-) (PCB 81)
Applied	No	NJ	WPP06.08081	NPW	Extraction, SIM, GC/MS  Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,3',4-) (PCB 82)
Applied	No	NJ	WPP06.08082	NPW		[EPA 1668A]	Pentachlorobiphenyl (2,2,3,3,5-) (PCB 83)
Applied	No	NJ	WPP06.08083	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,3',6-) (PCB 84)
Applied	No No	NJ	WPP06.08084 WPP06.08085	NPW NPW	Extraction, SIM, GC/MS Extraction, SIM, GC/MS	(EPA 1668A)	Pentachlorobiphenyl (2,2',3,4,4'-) (PCB 85)
Applied Applied	No:	ln Ln	WPP06.08086	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4,5-) (PCB 86)
Applied	No.	NJ	WPP06.08087	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyi (2,2',3,4,5'-) (PCB 87)
Applied	No	NJ	WPP06.08088	NPW	Extraction, SIM, QC/MS	[EPA 1668A]	Pentachlorobiphenyi (2,2',3,4,6-) (PCB 88)
Applied	No	NJ	WPP06.08089	NPW .	Extraction, SIM, GC/MS	[BPA 1668A]	Pentachlorobiphenyl (2,2',3,4,6'-) (PCB 89)
Applied	No	N	WPP06.08090	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4',5-) (PCB 90)
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### National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

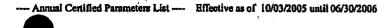
Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092

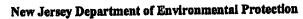


Category: WPP06 - Organic Parameters, Chromatography/MS

	Eligible to Report						Parameter Description
Status	NJ Data	State	Cede	Matrix	Technique Description	Approved Method	
Applied	No	NJ	WPP06.08091	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4',6-) (PCB 91)
Applied	No	NJ	WPP06.08092	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,5,5'-) (PCB 92)
Applied	No	NJ	WPP06.08093	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,5,6-) (PCB 93)
Applied	No	NJ	WPP06.08094	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,5,6'-) (PCB 94)
Applied	No	NJ	WPP06.08095	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,5',6-) (PCB 95)
Applied	No	NJ	WPP06.08096	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,6,6'-) (PCB 96)
Applied	No	NJ	WPP06.08097	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4',5'-) (PCB 97)
Applied	No	NJ	WPP06.08098	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4',6'-) (PCB 98)
Applied	No	NJ	WPP06.08099	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyi (2,2',4,4',5-) (PCB 99)
Applied	No	NJ	WPP06,08100	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachiorobiphenyi (2,2',4,4',6-) (PCB 100)
Applied	No	NJ	WPP06.08101	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,5,5'-) (PCB 101)
Applied	No ,	NJ	WPP06.08102	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,5,6'-) (PCB 102)
Applied	No	NJ	WPP06.08103	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyi (2,2',4,5',6-) (PCB 103)
Applied	No	NJ	WPP06.08104	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachiorobiphenyi (2,2',4,6,6'-) (PCB 104)
Applied	No	NJ	WPP06.08105	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4,4'-) (PCB 105)
Applied	No	NJ	WPP06.08106	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4,5-) (PCB 106)
Applied	No	NJ	WPP06.08107	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4',5-) (PCB 107)
Applied	No	NJ	WPP06.08108	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4,5'-) (PCB 108)
Applied	No	NJ	WPP06.08109	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4,6-) (PCB 109)
Applied	No	נא	WPP06.08110	NPW	Extraction, SIM, GC/M8	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4',6-) (PCB 110)
Applied	No	NJ	WPP06.08111	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',5,5'-) (PCB 111)
Applied	No	נא	WPP06.08112	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',5,6-) (PCB 112)
Applied	No	NJ	WPP06.08113	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',5',6-) (PCB 113)
Applied	No	NJ	WPP06.08114	NPW	Extraction, SIM, OC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,4,4',5-) (PCB 114)
Applied	No	NJ	WPP06.08115	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachiorobiphenyl (2,3,4,4',6-) (PCB 115)
Applied	No	NJ	WPP06.08116	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,4,5,6-) (PCB 116)
Applied	No	NJ	WPP06.08117	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,4',5,6-) (PCB 117)
Applied	No	נא	WPP06.08118	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4,4',5-) (PCB 118)
Applied	No	NJ	WPP06.08119	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphonyl (2,3',4,4',6-) (PCB 119)
Applied	No	NJ	WPP06,08120	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachiorobiphenyl (2,3',4,5,5'-) (PCB 120)
Applied	No	NJ	WPP06.08121	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4,5',6-) (PCB 121)
Applied	No	NJ	WPP06.08122	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4',5'-) (PCB 122)







## National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 - Organic Parameters, Chromatography/MS

	Eligible to Report				<u>.</u>	Approved Method	Parameter Description
tatus	NJ Data	State	Code	Matrix	Technique Description		Pentachlorobiphenyl (2,3',4,4',5-) (PCB 123)
pplied	No	NJ	WPP06.08123	NPW	Extraction, SIM, QC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4',5,5'-) (PCB 124)
Applied	No	NJ	WPP06.08124	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4',5',6-) (PCB 125)
\pplied	No	נא	WPP06.08125	npw	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (3,3',4,4',5-) (PCB 126)
pplied	No	NJ	WPP06.08126	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyi (3,3',4,5,5'-) (PCB 127)
pplied	No	M	WPP06.08127	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,4'-) (PCB 128
pplied	No	NJ	WPP06.08128	NPW .	Extraction, SIM, GC/M8	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,5-) (PCB 129)
pplied	No	NJ	WPP06.08129	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,5'-) (PCB 130
pplied	No	NJ	WPP06.08130	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	
pplied	No	NJ	WPP06.08131	NPW	Extraction, SIM, GC/M8	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,6-) (PCB 131'
pplied	No	NJ	WPP06.08132	NPW	Extraction, SIM, GC/MB	[EPA 1668A]	Hexachlorubiphenyl (2,2',3,3',4,6'-) (PCB 132
pplied	No	NJ	WPP06.08133	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Hexachlorobiphenyl (2,2',3,3',5,5'-) (PCB 133
pplied	No	NJ	WPP06.08134	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',5,6-) (PCB 134
pplied	No	NJ	WPP06.08135	NPW	Extraction, SIM, GC/MS	[HPA 1668A]	Hexachlorobiphenyi (2,2',3,3',5,6'-) (PCB 135
pplied	No	NJ	WPP06.08136	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',6,6'-) (PCB 136
pplied	No	NJ	WPP06.08137	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,4',5-) (PCB 137
pplied	No	NJ	WPP06.08138	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphonyl (2,2',3,4,4',5'-) (PCB 138
pplied	No	נא	WPP06.08139	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,4',6-) (PCB 139
pplied	No	NJ	WPP06.08140	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyi (2,2',3,4,4',6'-) (PCB 140
pplied	No	NJ	WPP06.08141	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,5,5'-) (PCB 141
pplied	No	נא	WPP06.08142	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,5,6-) (PCB 142)
pplied	No	NJ	WPP06.08143	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,5,6'-) (PCB 143)
pplied	No	NJ	WPP06.08144	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorohiphenyl (2,2',3,4,5',6-) (PCB 144
pplied	No	נא	WPP06.08145	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,6,6'-) (PCB 145
pplied	No	NJ LN	WPP06.08146	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4',5,5'-) (PCB 146
pplied	No .	NJ	WPP06.08147	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyi (2,2',3,4',5,6-) (PCB 147
	No	NJ	WPP06.08148	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyi (2,2',3,4',5,6'-) (PCB 144
pplied pplied	No No	NJ	WPP06.08149	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4',5',6-) (PCB 149
pplied	No No	NJ	WPP06.08150	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachiorobiphenyl (2,2',3,4',6,6'-) (PCB 150
pplied	No	NJ	WPP06.08151	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyi (2,2',3,5,5',6-) (PCB 151
pplied	No	NJ	WPP06.08152	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,5,6,6'-) (PCB 152
pplied	No	NJ	WPP06,08153	NPW	Extraction, SIM, GC/MS	[HPA 1668A]	Hexachlorobiphenyl (2,2',4,4',5,5'-) (PCB 15:
pplied	No	NJ	WPP06.08154	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachiorobiphenyi (2,2',4,4',5,6'-) (PCB 154

## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Bifective as of 10/03/2005 until 06/30/2006

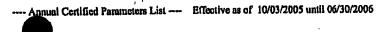
Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category:	WPP06	Organic Parame	eters, Chromatography/MS
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	Eligible to Report				Markatana Dagadatlan	Approved Method	Parameter Description
latus	NJ Data	State	Code	Matrix	Technique Description	[EPA 1668A]	Hexachlorobiphenyl (2,2',4,4',6,6'-) (PCB 155)
pplied	No	NJ	WPP06.08155	NPW	Extraction, SIM, GC/M8	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,4',5-) (PCB 156)
pplied	No	NJ	WPP06.08156	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,4',5'-) (PCB 157)
pplicd	No	ИJ	WPP06.08157	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,4',6-) (PCB 158)
pplied	No	NJ	WPP06.08158	NPW ·	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,5,5'-) (PCB 159)
pplied	No	NJ	WPP06,08159	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobinhenyl (2,3,3',4,5,6-) (PCB 160)
pplied	No	NJ	WPP06.08160	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,5',6-) (PCB 161)
pplied	No	NJ	WPP06.08161	NPW	Extraction, SIM, GC/MS	<b>6</b> — · · · ·	Hexachiorobiphanyi (2,3,3',4',5,5'-) (PCB 162)
pplied	No	NJ	WPP06.08162	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4',5,6-) (PCB 163)
pplied	No	NJ	WPP06.08163	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4',5',6-) (PCB 164)
pplied	No	NJ	WPP06.08164	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Hexachlorobiphenyl (2,3,3',5,5',6-) (PCB 165)
pplied	No	NJ	WPP06.08165	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,4,4',5,6-) (PCB 166)
pplied	No	NJ	WPP06.08166	NPW	Extraction, SIM, GC/MS	(EPA 1668A)	
pplied	No	NJ	WPP06.08167	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3',4,4',5,5'-) (PCB 167) Hexachlorobiphenyl (2,3',4,4',5',6-) (PCB 168)
pplied pplied	No	NJ	WPP06.08168	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	
pplied	No	NJ	WPP06.08169	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (3,3',4,4',5,5'-) (PCB 169)
pplied	No	וא	WPP06.08170	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,4',5-) (PCB 170)
pplied	No ·	NJ	WPP06.08171	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,4',6-) (PCB 171)
pplied	No	NJ	WPP06.08172	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5,5'-) (PCB 172)
44 .4	<b>\$1</b>	NJ	WPP06.08173	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5,6-) (PCB 173
pplied pplied	No No	NJ.	WPP06,08174	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5,6'-) (PCB 174)
pplied	No	NJ	WPP06.08175	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5',6-) (PCB 175)
pplied	No	NJ	WPP06.08176	NPW	Extraction, SIM, GC/MS	[EPA 1668A] ·	Heptachlorobiphenyl (2,2',3,3',4,6,6'-) (PCB 176)
pplied	No	· NJ	WPP06.08177	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Hentachlorobiphenyl (2,2',3,3',4,5',6'-) (PCB 177)
pplied	No	NJ	WPP06.08178	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Heptachlorobiphenyl (2,2',3,3',5,5',6-) (PCB 178)
pplied	Νσ	NJ	WPP06.08179	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',5,6,6'-) (PCB 179)





### National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 - Organic Parameters, Chromatography/MS

en en en en	Eligible to Report NJ Data	) State	Code	Matrix	Taskulana Pasanintian	Approved Method	Parameter Description
Status			WPP06.08180	NPW	Technique Description Extraction, SIM, GC/MS	[EPA 1668A]	Heptachiorobiphenyl (2,2',3,4,4',5,5'-) (PCB
Applied	No	NJ	WPF00,00100	ML W	exuscion, any, acris	[BIA 1000A]	180)
Applied	No	NJ	WPP06.08181	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',5,6-) (PCB 181)
Applied	No	שו	WPP06.08182	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',5,6'-) (PCB 182)
Applied	No	NJ	WPP06.08183	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',5',6-) (PCB 183)
Applied	No	NJ	WPP06.08184	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',6,6'-) (PCB 184)
Applied	No	NJ	WPP06.08185	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachkorobiphenyl (2,2',3,4,5,5',6-) (PCB 185)
Applied	No	NJ	WPP06.08186	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,5,6,6'-) (PCB 186)
Applied	No	NJ	WPP06.08187	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4',5,5',6-) (PCB 187)
Applied	No	NJ	WPP06.08188	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4',5,6,6'-) (PCB 188)
Applied	No	NJ	WPP06.08189	NPW	Extraction, SIM, GC/MS	[EPA 1668Å]	Heptachlorobiphenyl (2,3,3',4,4',5,5'-) (PCB 189)
Applied	No	N	WPP06.08190	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4,4',5,6-) (PCB 190)
Applied	No	N	WPP06.08191	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4,4',5',6-) (PCB 191)
Applied	No	NJ	WPP06.08192	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4,5,5',6-) (PCB 192)
Applied	No	NJ	WPP06.08193	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4',5,5',6-) (PCB 193)
Applied	No	NJ	WPP06.08194	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Qotachlorobiphenyl (2,2',3,3',4,4',5,5'-) (PCB 194)
Applied	No	NJ	WPP06.08195	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,4',5,6-) (PCB 195)
Applied	No	עא	WPP06.08196	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobinhenyi (2,2',3,3',4,4',5,6'-) (PCB 196)
Applied	No	נא	WPP06.08197	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,4',6,6'-) (PCB 197)
applied	No	N	WPP06.08198	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyi (2,2',3,3',4,5,5',6-) (PCB 198)
Applied	No	נא	WPP06.08199	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Octachiorobiphanyl (2,2',3,3',4,5,5',6'-) (PCB 199)
Applied	No	NJ	WPP06.08200	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Oclanhiorobiphenyl (2,2',3,3',4,5,6,6'-) (PCB 200)

### National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: WPP06 - Organic Parameters, Chromatography/MS

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		Report	<b>.</b>		30 A.I.	Markataina Darindadan	Approved Method	Parameter Description
8	Status	NJ Data	State	Code	Matrix	Technique Description		
7	Applied	No	M	WPP06.08201	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Oetachlorobiphenyl (2,2',3,3',4,5',6,6'-) (PCB 201)
	Applied	No	NJ	WPP06.08202	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Octachlorobiphenyl (2,2',3,3',5,5',6,6'-) (PCB 202)
4	Applied	No	NJ	WPP06.08203	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,4,4',5,5',6-) (PCB 203)
	Applied	No	NJ	WPP06.08204	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Octachlorobiphenyl (2,2',3,4,4',5,6,6'-) (PCB 204)
	Applied	No	NJ	WPP06.08205	NPW	Extraction, SIM, GC/MS	[BPA 1668A]	Octachlorobiphenyl (2,3,3',4,4',5,5',6-) (PCB 205)
	Applied	No	NJ	WPP06.08206	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Nonachlorobiphenyl (2,2',3,3',4,4',5,5',6-) (PCB 206)
	Applied	No	NJ '	WPP06.08207	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Nonachlorobiphenyl (2,2',3,3',4,4',5,6,6'-) (PCB 207)
	Applied	No	NJ	WPP06.08208	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Nonachiorobiphenyl (2,2',3,3',4,5,5',6,6'-) (PCB 208)
	Applied	No	NJ	WPP06.08209	NPW	Extraction, SIM, GC/MS	[EPA 1668A]	Decachlorobiphenyl (PCB 209)

Category: CLP01 - Multi-Media, Multi-Conc. Inorganies

Eligible	to
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Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Des
Applied	No	NJ	CLP01.03002	NPW, SCM	ICP	[EPA ILM05.3]	Aluminum
Applied	No	NJ LN	CLP01.03101	NPW, SCM	ICP/MS	[EPA ILM05.3]	Aluminum
Applied	No	NJ	CLP01.06002	NPW, SCM	ICP	[BPA 1LM05.3]	Antimony
Applied	No	NJ	CLP01.06101	NPW, SCM	ICP/MS	[BPA ILM05.3]	Antimony
Applied	No	NJ	CLP01.08002	NPW. SCM	ICP	[EPA ILM05.3]	Arzenic
Applied	No	NJ	CLP01.08101	NPW, SCM	ICP/MS	[EPA ILM05.3]	Arsenic
Applied	No	ŃJ	CLP01.11002	NPW, SCM	ICP	[BPA ILM05.3]	Barium
Applied	No	NJ	CLP01.11101	NPW, SCM	ICP/MS	[BPA ILM05.3]	Barium
Applied	No	NJ	CLP01.14002	NPW, SCM	ICP	[BPA ILM05.3]	Beryllium
Applied	No	NJ	CLP01.14101	NPW, SCM	ICP/MS	[EPA ILM05.3]	Boryllium
Applied	No	NJ	CLP01.19002	npw, scm	ICP	[EPA ILM05.3]	Cadmium
Applied	No	NJ	CLP01.19101	npw, scm	ICP/MS	[BPA ILM05.3]	Cadmium



#### National Environmental Laboratory Accreditation Program

#### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092

Eligible to

**Applied** 

**Applied** 

**Applied** 

Applied

Applied

Applied

Applied

No

No

No

No

No

No



Category: CLP01 - Multi-Media, Multi-Conc. Inorganics

NJ

NJ

NJ

NJ

NJ

NJ

NJ

	Report			,		•	
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	CLP01.21002	NPW, SCM	ICP	[EPA ILM05.3]	Calcium
Applied	No	NJ	CLP01.24002	NPW, SCM	ICP	(BPA ILM05.3)	Chromium
Applied	No	NJ	CLP01.24101	NPW, SCM	ICP/MS	[BPA ILM05.3]	Chromium
Applied	No	NJ	CLP01,27002	NPW, SCM	ICP	[EPA ILM05.3]	Cobalt
Applied	No	NJ	CLP01.27101	NPW, SCM	ICP/MS	[BPA ILM05.3]	Cobalt
Applied	No	NJ	CLP01.30002	NPW, SCM	ICP	[BPA ILM05.3]	Copper
Applied	No	NJ	CLP01.30101	NPW, SCM	ICP/MS	[EPA ILM05:3]	Copper
Applied	No	NJ ·	CLP01.33002	NPW, SCM	ICP	[EPA ILM05.3]	lron
Applied	No	NJ	CLP01.36002	NPW, SCM	ICP	[EPA 1LM05,3]	Lead
Applied	No	NJ	CLP01,36101	NPW, SCM	ICP/MS	[BPA ILM05.3]	Lead
Applied	No	NJ	CLP01.38002	NPW, SCM	ICP	[BPA ILM05.3]	Magnesium
Applied	No	NJ	CLP01.41002	NPW, SCM	ICP	[BPA ILM05.3]	Manganese
Applied	No	NJ	CLP01.41101	NPW, SCM	ICP/MS	[EPA ILM05.3]	Manganese
Applied	No	NJ	CLP01.42101.	NPW, SCM	CVAA, Manual	[EPA ILM05.3]	Mercury
Applied	No	NJ	CLP01,43101	NPW, SCM	CVAA, Automated	[EPA ILM05.3]	Mercury
Applied	No	NJ	CLP01.47002	NPW, SCM	ICP	[BPA ILM05.3]	Niokel
Applied	No	NJ	CLP01,47101	NPW, SCM	ICP/MS	[EPA ILM05.3]	Njakel
Applied	No	NJ	CLP01.49002	NPW, SCM	ICP	[EPA ILM05:3]	Potassium
Applied	No	NJ	CLP01.51002	NPW, SCM	ICP	[EPA ILM05,3]	Scienium
Applied	No	NJ	CLP01.51101	NPW, SCM	ICP/MS	[EPA ILM05.3]	Selenium .
Applied	No	NJ	CLP01.54002	NPW, SCM	ICP	[EPA ILM05.3]	Bilver
Applied	No	NJ	CLP01.54101	NPW, SCM	ICP/MS	[EPA ILM05.3]	Silver
Applied	No	NJ	CLP01,56002	NPW, SCM	ICP	[BPA 1LM05.3]	Sodium
Applied	No	NJ	CLP01.59002	NPW, SCM	ICP	[EPA ILM05.3]	Theilium
				· ·			

[EPA ILM05.3]

[EPA ILM05.3]

(EPA ILM05.31

[EPA ILM05.3]

[EPA 1LM05.3]

[EPA ILM05.3]

[BPA ILM05.3]

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

ICP/MS

ICP/MS

ICP/MS

Titrimetric, Spectrophotometric

Midi Distillation, Spectrophotometric

ICP

ICP

NPW, SCM

CLP01.59101

CLP01.63002

CLP01.63101

CLP01.66002

CLP01.66101

CLP01.67101

CLP01.69101

Cyanide, Total in Water and Soil / Sediments

Cyanido, Total in Water and Soil / Sediments

**Thallium** 

Vanadium

Vanadium

Zino

Zinc

### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: CLP02 - Multi-Media, Multi-Conc. Organics

. •	Eligible to Report NJ Data		Code	Matrix	Technique Description	Approved Method	Parameter Description
tatus		State		NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Aldrin
pplied	No	NJ	CLP02.01012	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Alpha BHC
pplied	No	И	CLP02.01022	•	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Beta BHC
Applied	No	NJ	CLP02.01032	. NPW, SCM	•	[EPA.SOM01.0 (8/2004)]	Delta BHC
pplied	No	NJ	CLP02.01042	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Lindane (gamma BHC)
Applied	No	NI	CLP02.01052	NPW, SCM	Extraction/GC (ECD)	[HPA SOMOLO (8/2004)]	Chlordane (alpha)
Applied	No	נא	CLP02.01062	NPW, SCM	Extraction/GC (ECD)	•	Chlordane (gamma)
pplied	No	NJ.	CLP02.01072	npw, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	DDD (4,4'-)
pplied	No	NJ	CLP02.01082	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	* * *
pplied	No	NJ	CLP02.01092	npw, scm	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	DDE (4,4'-)
pplied	No	NJ	CLP02.01102	npw, scm	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	DDT (4,4'-)
Applied	No	NJ	CLP02.01112	npw, scm	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Dieldrin .
Applied	No	NJ	CLP02.01122	npw, scm	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Endosulfan I
pplied	No	NJ	CLP02.01132	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Endosuifan II
pplied	No	NJ	CLP02.01142	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Endosulfan sulfate
Applied	No	NJ	CLP02.01152	NPW, SCM	· Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Endrin
pplied	No	NJ	CLP02.01162	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Endrin aldehyde
Applied	No	NJ	CLP02.01172	NPW, 8CM	Extenction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Endrin ketone
Applied	No	NJ	CLP02.01182	NPW, 8CM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Heptachlor
Applied	No	NJ	CLP02.01192	NPW, 8CM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Heptachlor epoxide
	No	NJ	CLP02.01202	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Methoxyohlor
Applied	No No	NJ	CLP02.01212	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	Toxaphene
Applied	No	NJ	CLP02.01232	NPW, 8CM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	PCB 1016
Applied		NJ	CLP02.01242	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	PCB 1221
Applied	No	NJ	CLP02,01252	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	PCB 1232
Applied	No	NJ	CLP02.01262	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	PCB 1242
Applied	No		CLP02.01202 CLP02.01272	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	PCB 1248
Applied	No	נא נא	CLP02.01272	NPW, SCM	Extraction/GC (ECD)	[EPA SOM01.0 (8/2004)]	PCB 1254
Applied Applied	No No	NJ	CLP02.01292	NPW, SCM	Extraction/GC (ECD)	[BPA SOM01.0 (8/2004)]	PCB 1260
Applied Applied	No	נא	CLP02.03022	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Benzene
Applied	No	NJ	CLP02.03026	NPW, SCM	GC/MS//SIM , P & T, Capillary	[EPA SOM01.0 (8/2004)]	Bromochloromethane
Applied	No.	NJ	CLP02.03032	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Chlorobenzene
Applied	No.	NJ	CLP02,03042	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dichlorobenzene (1,2-)
ABJERRACEL							







### National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 19/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: CLP02 -- Multi-Media, Multi-Conc. Organics

	Eligible to Report	)					
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	CLP02,03052	NPW, SCM	GC/MS/SIM, P & T, Capillary	[HPA SOM01.0 (8/2004)]	Dichlorobenzone (1,3-)
Applied	No	NJ	CLP02.03062	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dichlorobenzene (1,4-)
Applied	No	NJ	CLP02.03066	NPW, SCM	GC/MS//SIM , P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dioxane (1,4-)
Applied	No	NJ	CLP02.03072	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Ethylbenzene
Applied	No	NJ	CLP02.03082	NPW, SCM	GC/MS/SIM, P & T, Capillary	[BPA SOM01.0 (8/2004)]	isopropy ibenzene
Applied	No	NJ	CLP02.03088	NPW, SCM	GC/MS//SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Trichlorobenzene (1,2,3-)
Applied	No	NJ	CLP02.03092	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Trichlorobenzene (1,2,4-)
Applied	No	NJ	CLP02.03102	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Styrene
Applied	No	NJ	CLP02.03112	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Tolueno
Applied	No	NJ	CLP02.03116	NPW, SCM	GC/MS//SIM , P & T, Capillary	[EPA SOM01.0 (8/2004)]	Xylono (m- + p-)
pplied	No	NJ	CLP02.03118	NPW.SCM	GC/MS//SIM , P & T, Capillary	[EPA SOM01.0 (8/2004)]	Xylenc (o-)
pplied	No	NJ	CLP02.03142	NPW, 8CM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	· Bromodichloromethane
pplied	No	NJ	CLP02.03152	NPW, 8CM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Bromoform
pplied	No	NJ	CLP02.03162	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Bromomethane
pplied	No	NJ	CLP02.03172	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Carbon tetrachleride
pplied	No	NJ	CLP02.03182	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Chloroethane
pplied	No	NJ	CLP02.03192	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Chloroform
pplied	No	NJ	CLP02.03202	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Chloromethane
pplied	No	NJ	CLP02.03212	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dichloropropene (trans-1,3-)
pplied	No	NJ	CLP02.03222	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dibromoethane (1,2-) (EDB)
pplied	No	NJ	CLP02.03232	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dibromochloromethane
pplied	No	NJ	CLP02.03242	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (B/2004)]	Dibromo-3-chioropropane (1,2-)
pplied	No	NJ	CLP02.03252	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dichlorodifluoromethane
pplied	No	NJ	CLP02.03262	NPW, SCM	GC/MS/SIM, P & T, Capillary	[BPA SOM01.0 (8/2004)]	Dichloroethane (1,1-)
pplied	No	ИJ	CLP02.03272	NPW, SCM	GC/MS/SIM, P & T, Capillary	[BPA SOM01.0 (8/2004)]	Dichloroethane (1,2-)
pplied	No	NJ	CLP02.03282	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA 8OM01.0 (8/2004)]	Dichloroethene (1,1-)
pplied.	No	NJ	CLP02.03292	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dichloroethene (trans-1,2-)
pplied	No	NJ	CLP02.03302	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Dichleroethene (cis-1,2-)
pplied	No	NJ	CLP02.03312	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOMU1.0 (8/2004)]	Dichloropropane (1,2-)
pplied	No	NJ	CLP02.03322	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA 8OM01.0 (8/2004)]	Dichloropropens (cis-1,3-)
pplied	No	NJ	CLP02.03332	NPW, SCM	GC/MS/8IM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Methylene chloride (Dichloromethane)
Applied	No	NJ	CLP02.03342	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Tetrachioroethane (1,1,2,2-)

# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

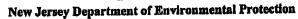
284 SHEFFIELD ST Mountainside, NJ 07092

Category: CLP02 - Multi-Media, Multi-Conc. Organics

-machan 1.	Eligible to Report	•			m e e Boudallan	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	[EPA SOM01.0 (8/2004)]	Tetrachloroethene
Applied	No	NJ	CLP02.03352	npw, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Trichloroethane (1,1,1-)
Applied	No	NJ	CLP02.03362	npw, scm	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Trichloroethane (1,1,2-)
Applied	No	NJ	CLP02.03372	npw, scm	OC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Trichloroethene
Applied	No	NJ	CLP02.03382	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Trichlorofluoromethane
Applied	No	NJ	CLP02.03392	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)
Applied	No	NJ	CLP02.03402	npw, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Vinyl chloride
Applied	No	NJ	CLP02.03412	npw, scm	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Acetone
Applied	No	NJ	CLP02.03432	npw, scm	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Carbon disulfide
Applied	No	NJ	CLP02.03442	npw, SCM	GC/MS/SIM, P & T, Capillary	[BPA SOM01.0 (8/2004)]	Cyclohexano
Applied	No	NJ	CLP02,03452	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Butanone (2-)
Applied	No	NJ	CLP02.03462	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Hexanone (2-)
Applied	No	NJ	CLP02.03472	npw, SCM	GC/MS/SIM, P & T, Capillary	[BPA SOM01.0 (8/2004)]	Methyl acctate
Applied	No	NJ	CLP02.03482	npw, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Methylcyclohexane
Applied	No	NJ	CLP02.03492	NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Pentanone (4-methyl-2-)
Applied	No	NJ	CLP02.03502	· NPW, SCM	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Test-butyl methyl ether
Applied	No	Ŋ	CLP02.03512	npw, scm	GC/MS/SIM, P & T, Capillary	[EPA SOM01.0 (8/2004)]	Atrazine
Applied	No	NJ	CLP02.04022	npw, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	N-Nitrosodiphenylamine
Applied	No	NJ	CLP02.04032	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	N-Nitroso-di-n-propylamine
Applied	No	NJ	CLP02.04042	npw, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Carbazole
	No	NJ	CLP02.04052	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Dichlorobenzidine (3,3'-)
Applied	No	ИJ	CLP02.04062	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Chloroanilino (4-)
Applied	No	NJ	CLP02.04072	npw, scm	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Nitroaniline (2-)
Applied	No	NJ	CLP02.04082	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Nitroaniline (3-)
Applied	No	NJ LK	CLP02.04092	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Nitroaniline (4-)
Applied Applied	No	NJ	CLP02.04102	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[HPA SOM01.0 (8/2004)]	Chloronaphthalene (2-)
	No	NJ	CLP02,04122	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Hexachlorobenzene
Applied Applied	No	NJ	CLP02.04132	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[HPA SOM01.0 (8/2004)]	Hexachlorobutadione (1,3-)
Applied	No	NJ	CLP02.04142	npw, scm	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Hexachlorocyclopentadiene
Applied	No	NI	CLP02.04152	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Hexachloroethane
Applied	No	NJ	CLP02.04162	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Bis (2-chloroethoxy) methans
Applied	No	NJ	CLP02.04182	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Bis (2-chloroisopropyl) ether
Applied	No	NJ	CLP02.04192	npw, scm	Extraction, GC/MS/SIM, Capillary		•







### National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092

Eligible to



Category: CLP02 - Multi-Media, Multi-Conc. Organics

	Report	,					
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	CLP02.04202	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Bis (2-chloroethyl) ether
Applied	No	NJ	CLP02.04212	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Chiorophenyi-phenyl ether (4-)
Applied	No	NJ	CLP02.04222	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Bromophenyl-phenyl ether (4-)
Applied	No	NJ	CLP02.04232	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Nitroaromatics and isophorone
Applied	No	ŊJ	CLP02.04242	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[BPA SOM01.0 (8/2004)]	Dinitrotoluene (2,4-)
	No	NJ.	CLP02.04252	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Dinitrotoluene (2,6-)
Applied	No	NJ	CLP02.04262	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Isophorono
Applied			CLP02.04272	NPW. SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Nitrobenzono
Applied	No	NJ	CLP02.04272 CLP02.04292	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Butyl benzyl phthalate
Applied	No	NJ	CLP02.04392 CLP02.04302	NPW. SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Bis (2-ethylhoxyl) phthalate
Applied	No	NJ	CLP02.04302 CLP02.04312	NPW.SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Diethyl phthalate
Applied	No	NJ	CLP02.04312	NPW.SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Dimethyl phthalato
Applied	No	NJ	CLP02.04322 CLP02.04332	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Di-n-butyl phthalate
Applied	No	ŃJ	•=	NPW. SCM	Extraction, GC/MS/SIM, Capillary	[BPA SOM01.0 (8/2004)]	Di-n-octyl phthalate
Applied	No	NJ	CLP02.04342 CLP02.04362	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Aconaphthene
Applied	No	NJ	CLP02.04362 CLP02.04372	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01,0 (8/2004)]	Anthrecone
Applied	No	NJ	CLP02,04372 CLP02,04382	NPW, SCM	Batraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Acemphthylene
Applied	No	NJ		NPW. SCM	Extraction, GC/MS/SIM, Capitlary	[BPA SOM01.0 (8/2004)]	Bonzo(a)anthrucene
Applied	No	NJ	CLP02.04392	NPW. SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Benzo(a)pyrene
Applied	No	NJ	CLP02.04402	* **	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Benzo(b)fluomnthene
Applied	No	NJ	CLP02,04412	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Benzo(ghi)perylene
Applied	No	NJ	CLP02.04422	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Benzo(k)fluomnihene
Applied	No	NJ	CLP02.04432	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Chrysono
Applied	No	NJ	CLP02.04442	NPW, SCM		[EPA SOM01.0 (8/2004)]	Dibenzo(a,h)anthracene
Applied	No	NJ	CLP02.04452	NPW, SCM	Extraction, OC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Fluoranthene
Applied	No	NJ	CLP02.04462	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Fluorene
Applied	No .	ŊJ	CLP02.04472	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Indeno(1,2,3-ed)pyreno
Applied	No	NJ	CLP02.04482	npw, scm npw, scm	Extraction, GC/MS/SIM, Capillary Extraction, GC/MS/SIM, Capillary	[EPA SOMOI.0 (8/2004)]	Methylnaphthalene (2-)
Applied	No No	NJ NJ	CLP02.04492 CLP02.04502	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Naphthalone
Applied	No No	NJ	CLP02.04502 CLP02.04512	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Phenanthrene
Applied	No No	NJ	CLP02.04512	NPW, SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Pyrene
Applied	No No	NJ	CLP02.04542	NPW. SCM	Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)]	Methyl phenol (4-chloro-3-)
Applied	NO	M	CLFU2,04342	141. 14 DOM:	Purangal Axianani, Ashum)	feet to decrease ferring .Nt	· • • · · ·

## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092

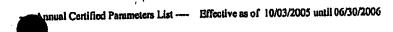


### Category: CLP02 - Muiti-Media, Multi-Conc. Organics

	Eligible to Report					A	Parameter Description
Pantun		State	Code	Matrix	Technique Description		
Status  Applied	Report NJ Data  No	State NI	Code  CLP02.04552 CLP02.04562 CLP02.04572 CLP02.04582 CLP02.04592 CLP02.04602 CLP02.04612 CLP02.04632 CLP02.04632 CLP02.04652 CLP02.04662 CLP02.04662 CLP02.04672 CLP02.04672 CLP02.04772 CLP02.04772 CLP02.04772 CLP02.047732	NPW, SCM	Extraction, GC/MS/SIM, Capillary	Approved Method  [EPA SOM01.0 (8/2004)]   Chlorophenol (2-) Dichlorophenol (2,4-) Dimethylphenol (2,4-) Dinitrophenol (2,4-) Phanol (4,6-dinitro-2-methyl-) Methylphenol (2-) Methylphenol (4-) Nitrophenol (2-) Nitrophenol (4-) Pentachlorophenol Phenol Trichlorophenol (2,4,5-) Trichlorophenol (2,4,6-) Acetophenone Benzaldchyde Biphenyl (1,1'-) Caprolactam Dibenzofuran Tetrachlorobenzeno (1,2,4,5-)	
Applied Applied	No No	נא נא	CLP02.04742 CLP02.04752	npw, scm npw, scm	Extraction, GC/MS/SIM, Capillary Extraction, GC/MS/SIM, Capillary	[EPA SOM01.0 (8/2004)] [EPA SOM01.0 (8/2004)]	Tetrachlorophenol (2,3,4,6-)

### Category: SHW02 - Characteristics of Hazardous Waste

. •	Eligible to Report					Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description		imitability
Certified	Yes	NJ	SHW02.01000	NPW, SCM	Pensky Martons	[SW-846 1010, Rev. 0, 9/86]	Corrosivity - pH waste, >20% water
		NJ	SHW02.03000	NPW, SCM	Aqueous Waste, Potentiometric	[SW-846 9040B, Rev. 2, 1/95]	
Certified	Yes		SHW02.04000	NPW, SCM	Weight Loss In Acid Media	[SW-846 1110, Rev. 0, 9/86]	Cornesivity toward steel
Certified	Yos	NJ		NPW, SCM	TCLP, Toxicity Procedure, ZHE	[SW-846 1311, Rev. 0, 7/92]	Volatile organics
Certified	Yes	M	SHW02.06900		TCLP, Toxicity Procedure, Shaker	[SW-846 1311, Rev. 0, 7/92]	Metals - semi volutile organics
Certified	Yes	NJ	SHW02,07000	NPW, SCM		[SW-846 1312, Rev. 0, 9/94]	Metals - organics
Continue	Van	NI	SHW02.08000	npw, scm	Synthetic PPT Leachate Procedure	Durate tars teat of see it	<del>-</del>



## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

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Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW02 - Characteristics of Hazardous Waste

Eligible to

Report

No

Status

**Applied** 

Status

Certified

NJ Data

Code SHW02.09000

Matrix

**Multiple Extraction** NPW. SCM

Technique Description

Approved Method [SW-846 1320, Rev. 0, 9/86] **Parameter Description** 

Metals - organics

Category: SHW03 - Analyze-Immediately Parameters

NJ

State

NJ

Eligible to

Report

Yes

**NJ** Data

State Codo

Matrix SHW03.01000 ·

Technique Description Aqueous, Electrometric NPW, SCM

Approved Method [SW-846 9040B, Rev. 2, 1/95] **Parameter Description** 

Category: SHW04 - Inorganic Parameters

Eligible to

*	Report		2 4		im-tinless Planeduttes	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	[SW-846 6010B, Rov. 2, 12/96]	Aluminum
Certified	Yes	NJ	SHW04.05000	npw, scm	ICP	[SW-846 6020, Rov. 0, 9/94]	Aluminum
Certified	Yes	NJ	SHW04.05500	npw, scm	ICP/MS		Antimony
Certified	Yes	NJ	SHW04.06500	npw, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Antimony
Certified	Yes	NJ	SHW04.07000	NPW, SCM	ICP/MS	[SW-846 6020, Rov. 0, 9/94]	_ ·
Certified	Yes	N	SHW04.09000	NPW, SCM	ICP .	[SW-846 6010B, Rev. 2 12/96]	Amenic
Certified	Yes	N	SHW04.09500	NPW. SCM	ICP/MS	[SW-846 6020, Rov. 0, 9/94]	Arsenio
Certified	Yes	נא	SHW04.11500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Barium
		עא	SHW04.12000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Banun
Certified	Yes		SHW04.13500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Beryllium
Certified	Yes	נא		NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Beryllium
Certified	Ycs	NJ	SHW04.14000	•	ICP	[SW-846 6010B, Rev. 2, 12/96]	Boron
Cortified	Ycs	NJ	SHW04.15100	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Cedmium
Cortified	Yes	NJ	SHW04.15500	NPW, SCM		[SW-846 6020, Rev. 0, 9/94]	Cadmium
Certified	Yes	NJ	SHW04.16000	NPW, SCM	ICP/MS	[SW-846 6010B, Rev. 2 12/96]	Calcium
Certified	Yes	NJ	SHW04,17500	NPW, 8CM	ICP .	[SW-846 6020, Rov. 0, 9/94]	Calcium
Certified	Yes	עא	SHW04.17505	NPW, SCM	ICP/MS	[SW-846 6010B, Rev. 2 12/96]	Chromium
Certified	Yes	N	SHW04.18500	NPW, SCM	ICP	[SW-846 6020, Rev. 0, 9/94]	Chromium
Certified	Yes	NJ	SHW04.19000	NPW, SCM	ICP/MS	[SW-846 7196A, Rev. 1, 7/92]	Chromium (VI)
Certified	Yes	NJ	SHW04.21000	NPW, SCM	Colorimetric	[SW-846 6010B, Rev. 2 12/96]	Cobalt
Cartifiad	Vac	NI	SHW04.22500	NPW. SCM	ICP	Distant see s seed	

#### National Environmental Laboratory Accreditation Program

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Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

· 284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW04 - Inorganic Parameters

	Eligible to Report	,					
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.23000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Cobalt
Certified	Yes	NJ	SHW04.24500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Copper
Certified	Yes	NJ	SHW04.25000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Copper
Certified	Yes	NJ	SHW04.26000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Iron
Certified	No	NJ	SHW04.26005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Iron
Certified	Yos	NJ	SHW04.27500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Lead
Certified	Yes	NJ	5HW04,28000	NPW, SCM	ICP/M8	[SW-846 6020, Rev. 0, 9/94]	Lead
Applied	No	NJ	SHW04.29500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Lithium
Certified	Yes	NJ	SHW04.30500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Magnesium
Certified	Yes	נא	SHW04.30505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Magnesium
Certified	Yes	NJ	SHW04.31500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Manganese
Certified	Yes	NJ	SHW04.31600	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Manganese
Certified	Yes	NJ	SHW04.33000	NPW, SCM	AA, Manual Cold Vapor	[SW-846 7470A, Rev. 1, 9/94]	Mercury - liquid waste
Certified	Yes	NJ	SHW04.34000	NPW, SCM	iCP	[SW-846 6010B, Rev. 2 12/96]	Molybdenum
Applied	No	NJ	SHW04.34005	NPW, SCM	ICP/MS	[8W-846 6020, Rev. 0, 9/94]	Molybdenum
Certified	Yes	NJ	SHW04,35500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Nickel
Certified	Yes	NJ	SHW04,36000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Nickel
Certified	Yes	NJ	. SHW04,38000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Potassium
Certified	Yes	NJ	SHW04.38505	NPW, SCM	ICP/MS	[SW-846 6020, Rov. 0, 9/94]	Potassium
Certified	Yes	NJ	SHW04.39000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Selenium
Certificd	Yes	NJ	SHW04.40600	NPW,SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Selenium
Certified	Yes	NJ	SHW04.41000	NPW, SCM	ICP	[SW-846 6010B, Rov. 2 12/96]	Silver
· Certified	Yes	NJ	SHW04.41500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Silver
Certified	Yes	NJ	SHW04.43000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Sodium
Certified	Yes	NJ	SHW04,43005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Sodium
Applied	No	NJ	SHW04.44000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Strontium
Applied	No	NJ	SHW04.44001	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Strontium
Certified	Yes	NJ	SHW04.45000	npw, scm	ICP	[SW-846 6010B, Rev. 2 12/96]	Thallium
Certified	Yes	NJ	SHW04.45500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Thailium
Certified	Yes	NJ	SHW04.47100	npw, scm	ICP	[SW-846 6010B, Rev. 2, 12/95]	Tin
Applied	No	NJ	SHW04.47105	npw, scm	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Tin
Applied	No	NJ	SHW04.47150	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Titanium .





### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



#### Category: SHW04 - Inorganic Parameters

	Eligible to						•
Status	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Applied	No	NJ	SHW04.47170	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Tungsten
Certified	Yes	NJ	SHW04,47500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96]	Vanadium Vanadium
Certified	Ycs	NJ	SHW04.47505	NPW, SCM	ICP/MS	[SW-846 6020, Rov. 0, 9/94]	Zino
Certified	Yes	NJ	SHW04.49000	npw, scm	ICP	[SW-846 6010B, Rev. 2 12/96]	Zinc
Certified	Yes	NJ	SHW04.49500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Zirconium
Applied	No	NJ	SHW04.51050	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	211401113111

#### Category: SHW06 - Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW06.03010	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Acetono
Certified	Yes	NJ	SHW06.03020	NPW, SCM	GC, Direct Injection or P & T, FiD	[SW-846 8015B, Rev. 2, 12/96]	Acctonitrile
Certified	Yes	NJ	SHW06.03030	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rov. 2, 12/96]	Acrolein
Certified	Yes	NJ	SHW06.03040	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Aliyi alcohol
Certified	Yes	NJ	SHW06.03050	NPW, SCM	GC, Direct Injection or P & T, FiD	[SW-846 8015B, Rev. 2, 12/96]	Tert-butyl alcohol
Certified	Yes	NJ	SHW06.03060	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Crotonaldehyde
Certified	Yes	NJ	SHW06.03070	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Dioxane (1,4-)
		נא	SHW06.03080	NPW, SCM	GC, Direct Injection or P.& T, FID	[SW-846 8015B, Rev. 2, 12/96]	Ethylene Oxide
Certified	Yes	וא נא	SHW06.03090	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	iso-butyi alcohol
Certified		נא	SHW06.03100	NPW, SCM	GC. Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Methyl ethyl ketone
Certified	Yes	NJ	SHW06.03110	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	N-Nitroso-di-n-butylamine
Certified	Yes			NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Paraldehyde
Centified	Yes	ŊJ	SHW06.03120	•	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Picoline (2-)
Certified	Yes	NJ	SHW06.03130	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Propionitrile
Certified	Yes	NJ	SHW06.03140	NPW, 8CM	- · · · · · · · · · · · · · · · · · · ·	[SW-846 8015B, Rev. 2, 12/96]	Pyridine
Certified	Yes	NJ	SHW06.03150	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Toluidine (2-)
Certified	Yes	ŊJ	SHW06.03160	NPW, SCM	GC, Direct Injection or P & T, FID	[SW-846 8015B, Rev. 2, 12/96]	Gasoline range organic
Certified	Yes	NJ	SHW06,04010 SHW06,04500	NPW, SCM NPW, SCM	GC P&T, FID Extraction, GC, FID	[SW-846 8015B, Rev. 2, 12/96]	Diesel range organic
Contilled	Yes	NJ		•	Extraction, GC, FID	[OTHER PL - PRO]	Petroleum Organics
Applied	No	NJ	SHW06.04511	NPW, SCM		[SW-846 8021B, Rev. 2, 12/96]	Benzene
Certified	Y.es	NJ	SHW06,05010	npw, scm	GC, Direct Injection or P & T, PID-HECD	ניאנו ויב בין העודה האים הבים הבים בים בים	

# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SIIW06 - Organic Parameters, Chromatography

	Eligible to	)					Parameter Description
	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Chlorobenzene
Status			SHW06,05020	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	SHW06.05030	NPW. SCM	GC, Direct Injection or P & T, PID-HECD	[8W-846 8021B, Rev. 2, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	SHW06.05040	NPW. SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichicrobenzene (1,4-)
Certified	Yes	NJ	SHW06.05050	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rov. 2, 12/96]	Ethylbenzene
Certified	Yes	NJ	SHW06.05060	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Naphthalone
Certified	Yes	M	SHW06.05066	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	
Certified	Yes	ИJ		NPW, SCM	GC, Direct Injection or P & T, PID-HBCD	[SW-846 8021B, Rev. 2, 12/96]	Styrene
Certified	Yes	M	SHW06.05068	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Toluens
Certified	Yes	M	SHW06.05070	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Xylone (o-)
Certified	Yes	NJ	SHW06.05080	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Xylene (m-)
Certified	Yes	NJ	SHW06.05090	NPW, SCM	GC, Direct Injection or P.&.T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Xylene (p-)
Certified	Yes	נא	SHW06.05100	•	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Bromodichloromethane
Certified	Yes	NJ	SHW06.05110	NPW, SCM	GC, Direct Injection or P & T, PID-HBCD	[SW-846 8021B, Rev. 2, 12/96]	Bromoform
Certified	Yes	Ŋ	SHW06.05120	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Bromomethane
Certified	Yes	NJ	SHW06.05130	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Carbon tetrachloride
Certified	Yes	NJ	SHW06.05140	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Chloroethane.
Certified	Yes	NJ	SHW06.05150	NPW, 8CM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Chloroform
Certified	Yes	NJ	SHW06.05160	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rov. 2, 12/96]	Chloromethane
Certified	Yes	NJ	SHW06.05170	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rov. 2, 12/96]	Dichloropropene (trans-1,3-)
Certified	Yes	N	SHW06.05180	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dibromochloromethane .
Certified	Yes	ŊJ	SHW06.05190	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichlorodifluoromethane
Certified	Yes	N	SHW06.05200	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethane (1,1-)
Certified	Yes	NJ	SHW06.05210	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethane (1,2-)
Certified	Yes	NI	SHW06.05220	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021 B, Rov. 2, 12/96]	Dichloroethene (1,1-)
Certified	Yes	NJ	SHW06,05230	NPW, SCM	GC, Direct injection or P & T, PID-HECD	[SW-846 8021B, Rov. 2, 12/96]	Dichloroethene (cis-1,2-)
Certified	Yes	NJ	SHW06.05240	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloroethens (trans-1,2-)
Certified	Yes	NJ	SHW06.05250	NPW, SCM	GC, Direct Injection or P & T, PID-HBCD	[SW-846 8021B, Rev. 2, 12/96]	Dichloropropane (1,2-)
Certified	Yes	NJ	SHW06,05260	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Dichloropropono (cis-1,3-)
Contilled	Yes	NJ	SHW06.05270	npw, SCM Npw, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Methylene chloride (Dichloromethane)
Certified	Yes	NJ	SHW06.05280	NPW, SCM	GC, Direct injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Tetrachioroethane (1,1,2,2-)
Certified	Yes	; NJ	SHW06,05290	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Tetrachloroethene
Certified	Yes	. NJ	SHW06.05300	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichloroethane (1,1,1-)
Certified	Yes	NJ	SHW06,05310	14F 17, 0CAVI	OC, photologodal of the second cold of Calle		







#### National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW06 - Organic Parameters, Chromatography

	Eligible to Report						Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	
Certified	Yes	NJ	SHW06.05320	npw, scm	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichloroethane (1,1,2-)
Certified	. Yes	NJ	SHW06.05330	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichloroethene
Certified	Yes	NJ	SHW06.05340	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Trichlorofluoromethane
Certified	Yes	NJ	SHW06.05350	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Vinyl chloride
Certified	Yes	NJ	SHW06.05360	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Mothyl tert-butyl other
Certified	Yes	NJ	SHW06.05370	NPW, SCM	GC, Direct Injection or P & T, PID-HECD	[SW-846 8021B, Rev. 2, 12/96]	Chloroethyl vinyl ether (2-)
Certifled	Yes	NJ	SHW06.12010	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Aldrin ·
Certified	Yes	NJ	SHW06.12020	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Alpha BHC
Certified	Yes	NJ	SHW06.12030	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081 A, Rev. 1, 12/96]	Beta BHC
Certified	Yes	NJ	SHW06.12040	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Delta BHC
Certifled	Yes'	NJ	SHW06.12050	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Lindane (gamma BHC)
Certified	Yes	NJ	SHW06.12060	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlordane (technical)
Certified	Yes	NJ	SHW06.12070	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 808   A, Rev. 1, 12/96]	Chlordane (alpha)
Certified	Yes	NJ	SHW06.12080	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chiordane (gamma)
Certified	Yes	NJ	SHW06.12090	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDD (4,4'-)
Certified	Yes	NJ.	SHW06,12100	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDE (4,4'-)
Certified	Yes	NJ	SHW06.12110	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDT (4,4'-)
Certified	Yes	NJ	SHW06.12120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081 A, Rev. 1, 12/96]	Dieldrin
Certified	Yes	NJ	SHW06.12130	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan I
Certified	Yes	NJ	SHW06.12140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan II
Certified	Yes	NJ	SHW06.12150	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan sulfate
Certified	Yes	NJ	SHW06.12160	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin .
Certified	Yes	NJ	8HW06.12170	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin aldehyde
Certified	Yes	NJ	SHW06.12180	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin ketone
Certified	Yes	נא	8HW06.12190	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Heptachior
Certified	Yes	NJ	811W06,12200	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Heptachlor epoxide
Certified	Yes	נא	8HW06.12210	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Methoxychlor
Applied	No	NJ	8HW06.12212	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Mirex
Certified	Yes	נא	SHW06.12220	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Toxaphene
Certified	Yes	NJ	SHW06.13110	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1016
Certified	Yes	NJ	SHW06.13120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1221
Certified	Yes	NJ	SHW06.13130	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1232

## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



#### Category: SHW96 - Organic Parameters, Chromatography

	Eligible to	ı				•	
	Report NJ Data	64-4-	Code	Matrix	Technique Description	Approved Method	Parameter Description
Status		State		NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1242
Certifled	Yes	NJ	SHW06,13140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1248
Certified	Yes	NJ	SHW06.13150	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1254
Certified	Yes	NJ	SHW06.13160	NPW. SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1260
Certified	Yes	נא	SHW06.13170		GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB Congeners (19)
Applied	No	N	SHW06.13200	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Azinphos methyl
Applied	No	נא	SHW06.21010	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Chloropyrifos
Applied	No	NJ	SHW06.21015	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94]	Demeton (o-)
Applied	No	נא	SHW06.21020	NPW, SCM	GC. Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Demeton (s-)
Applied	No	NJ	SHW06.21030	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 B141A, Rev. 1, 9/94]	Diazinon
Applied	No	NJ	SHW06.21040	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD, Cap	[SW-846 8141A, Rev. 1, 9/94]	Disulfoton
Applied	No	NJ	SHW06.21050	NPW, SCM		[SW-846 8141A, Rev. 1, 9/94]	Malathion
Applied	No	N	SHW06.21060	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94]	Parathion othyl
Applied	Na	NJ	SHW06.21070	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94]	Parathion methyl
Applied	No	NJ	8HW06.21080	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8151A, Rev 1, 9/96]	Dalapon
Certified	Yes	NJ	SHW06,23010	NPW, SCM	GC, Extraction, ECD, Capillary	[8W-846 8151A, Rev 1, 9/96]	Dicamba
Certified	Yes	NJ	SHW06.23020	npw, SCM	GC, Extraction, ECD, Capillary		Dinosob
Certified	Yes	NJ	8HW06.23030	npw, scm	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	D (2,4-)
Certified	Yes	NJ	SHW06.23040	npw, scm	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	T (2,4,5-)
Certified	Yes	NJ	SHW06.23050	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	TP (2,4,5-) (Silvex)
Certified	Yes	NJ	SHW06.23060	npw, scm	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	Dichlorobenzole acid (3,5-)
Applied	No	NJ	SHW06.23061	NPW, SCM	GC, Extract or Direct Inf, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Hydroxydicamba (5-)
Applied	No	NJ	SHW06.23062	NPW, SCM	GC, Extract or Direct Inj, ECD, Capillary	[SW-846 8151A, Rov. 1, 9/96]	• -
Applied	No	NJ	SHW06.23063	NPW, SCM	GC, Extract or Direct Inj. ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	MCPA
Applied	No	NJ	SHW06.23064	NPW, SCM	GC, Extract or Direct Inj, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	MCPP
Applied	No	NJ	SHW06.23065	NPW, SCM	GC, Extract or Direct Inj, ECD, Capillary	[SW-846 8151A, Rov. 1, 9/96]	Nitrophenol (4-)
Applied	No	NJ	SHW06.23066	NPW, SCM	GC, Extract or Direct Inj, ECD, Capillary	[SW-846 8151A, Rov. 1, 9/96]	Pentachlorophenol
Certified	Yes	NJ .	SHW06.23070	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	Picloram
Certified	Yes	NJ	SHW06.24110	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Acenaphthene
Certified	Yes	NJ	SHW06.24120	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Acenaphthylene Anthracene
Certified	Yes	NJ	SHW06.24130	npw, scm	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(a)anthracene
Certified	Yes	NJ	SHW06.24140	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	
Certified	Yes	NJ	SHW06.24150	npw, scm	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(a)pyrene



## National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW06 - Organic Parameters, Chromatography

	Eligible to	ı					
Status	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Cartified	Yes	NJ	SHW06.24160	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(b)fluoranthene
Certified	Yes	NJ.	SHW06.24170	NPW. SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(ghi)perylene
Certified	Yes	NJ	SHW06,24180	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(k)fluoranthene
Certified	Yes	NJ	SHW06.24190	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Chrysene
Certified	Yes	ИJ	SHW06.24200	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Dibenzo(a,h)anthracene
Certified	Yes	NJ	SHW06.24210	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Fluoranthene
Certified	Yes	NJ	SHW06.24220	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Fluorene
Certified	Yes	NJ	SHW06.24230	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Indeno(1,2,3-cd)pyrene
Certified	Yes	NJ	8HW06.24240	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Naphthalene
Certified	Yes	NJ	SHW06.24250	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Phenanthrene
Certified	Yes	NJ	SHW06.24260	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Pyreno
Certified	Yes	NJ	SHW06.28010	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	нмх
Certified	Yes	N	8HW06,28020	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	RDX
Certified	Yes	נא	SHW06.28030	NPW, SCM	HPLC, UV Delector	[SW-846 8330, Rev. 0, 9/94]	Trinitrobenzene (1,3,5-)
Certified	Yes	NJ	SHW06,28040	NPW, SCM	HPLC, UV Delector	[5W-846 8330, Rev. 0, 9/94]	Dinitrobenzene (1,3-)
Certificd	Yes	N	SHW06.28050	NPW, SCM	HPLC, UV Delector	[SW-846 8330, Rev. 0, 9/94]	Tetryl
Certified	Yes	NJ	SHW06.28060	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrobenzens
Certified	Yes	N	SHW06.28070	NPW. SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Trinitrotolucne (2,4,6-)
Certified	Yes	NJ	SHW06.28080	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotoluene (4-amino-2,6-)
Certified	Yes	NJ	SHW06.28090	NPW, 8CM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotoluene (2-amino-4,6-)
Certified	Yes	"NJ	SHW06.28100	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotoluene (2,4-)
Certified	Yes	NJ	SHW06.28110	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Dinitrotoluene (2,6-)
Certified	Yes	NJ	SHW06.28120	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrotoluene (2-)
Certified	Yes	NJ	SHW06.28130	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrotoluene (3-)
Certified	Yes	NJ	SHW06.28140	NPW, SCM	HPLC, UV Detector	[SW-846 8330, Rev. 0, 9/94]	Nitrotoluene (4-)
Applied	No	NJ	SHW06.29100	NPW, SCM	HPLC, UV Detector	[SW-846 8332 Rev. 0, 12/96]	Nitroglycerine

#### National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW07 - Organic Parameters, Chromatography/MS

	Eligible to Report	)					
Status	NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW07.04010	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Benzene
Certified	Yes	NJ	SHW07.04020	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorobenzene
Certified	Yes	NJ	SHW07.04030	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	SHW07.04040	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	SHW07.04050	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,4-)
Certified	Yos	LN.	SHW07.04060	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846.8260B, Rov. 2, 12/96]	Ethylbenzene
Certified	Yes	NJ	SHW07.04070	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Toluene
Certified	Yes	NJ	SHW07.04080	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Xylenes (total)
Certified	Yes	NJ	SHW07.04090	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromodichloromethane
Certified	Yes	NJ	SHW07.04100	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rov. 2, 12/96]	Bromoform
Certified	Yes	NJ	SHW07.04110	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromomethane
Certified	Yes	NJ	SHW07.04120	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Carbon tetrachloride
Certified	Yes	NJ	SHW07.04130	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorosthane
Certified	Yes	NJ	SHW07.04140	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroethyl vinyl ether (2-)
Certified	Yes	NJ	SHW07.04150	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroform
Certified	Yes	N	SHW07.04160	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloromethane
Certified	Yes	NJ	SHW07.04170	NPW, 8CM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (trans-1,3-)
Certified	Yes	NJ	SHW07.04180	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromochloromethane
Certified	Yes	נא	SHW07.04185	NPW, 8CM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromoethane (1,2-) (EDB)
Certified	Yes	NJ	SHW07.04187	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	NJ	SHW07.04190	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorodifluoromethane
Certified	Yes	NJ	SHW07.04200	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,1-)
Certified	Yes	NJ	SHW07.04210	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,2-)
Certified	Yes	NJ	SHW07.04220	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (1,1-)
Certified	Yes	NJ	SHW07.04230	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethens (trans-1,2-)
Certified	Yes	NJ	SHW07.04235	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (cis-1,2-)
Certified	Yes	NJ	SHW07.04240	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (1,2-)
Certified	Ycs	NJ	SHW07.04250	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropens (cis-1,3-)
Certified	Yes	ИJ	SHW07.04260	npw, scm	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methylene chloride (Dichloromethane)
Certified	Yes	ŊJ	SHW07.04270	npw, scm	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethane (1,1,2,2-)
Certified	Yes	NJ .	SHW07.04280	npw, scm	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethene
Certified	Yes	NJ	SHW07.04290	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,1-)



## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW07 - Organic Parameters, Chromatography/MS

	Eligible to Report			#W.co.b.	Technique Description	Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,2-)
Certified	Yes	NJ	SHW07.04300	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroetheno
Certified	Yes	NJ	SHW07.04310	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorofluoromethane
Certified	Ycs	NI	SHW07.04320	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)
Certified	Yes	NJ	SHW07.04322	NPW, SCM		[SW-846 8260B, Rev. 2, 12/96]	Trichloropropane (1,2,3-)
Certified	Yes	NJ	SHW07.04325	npw, scm	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl acetate
Certified	Yes	ИJ	SHW07.04327	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl chloride
Certified	Yes	NJ	SHW07.04330	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acetone
Certified	Yes	NJ	SHW07.04340	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary		Carbon disulfide
Certified	Yes	NJ	SHW07.04350	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Butanone (2-)
Certified	Yes	NJ	SHW07.04360	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexanone (2-)
Certified	Yes	NJ	SHW07.04370	npw, scm	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl iodide
Certified	Yes	NJ	SHW07.04375	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Pentanone (4-methyl-2-)
Certified	Yes	NJ	SHW07.04380	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Mothyl tert-butyl ether
Certified	Yes	NJ	SHW07.04390	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tort-butyl alcohol
Certified	Yes	NJ	SHW07.04395	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrolein
Certified	Yes	NJ	SHW07.04400	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	
Certified	Yes	NJ	SHW07.04410	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrylonitrilo
Certified	Yes	NJ	SHW07.04500	npw, scm	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexachlorobutadiene (1,3-)
Certified	Yes	NJ	SHW07.04530	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexachlorosthane
Certified	Yes	NJ	SHW07.04540	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[8W-846 8260C, Rev. 2, 12/96]	Naphthalene
Certified	Yes	NJ -	SHW07.04550	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Styrene
Certified	Yes	NJ	SHW07.04560	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethane (1,1,1,2-)
Certified	Yes	נא	SHW07.04570	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorobenzene (1,2,4-)
Certified	Yes	נא	SHW07.04580	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Nitrobenzene
Certified	Yes	NJ	SHW07.05006	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitroso-di-n-propylamine
Certified	Yes	NJ	SHW07.05010	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosodiphenylamino
Certified	Yes	NJ.	SHW07.05020	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Diphenylamine
Certified	Yes	NJ	SHW07.05030	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Carbazole
Certified	Yes	ИJ	SHW07.05038	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzidine
Certified	Yes	NJ	SHW07.05040	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichtorobenzidine (3,3'-)
Certified	Yes	NJ	SHW07.05048	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Aniline
Certified	Yes	NJ	SHW07.05050	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chloraniline (4-)

# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

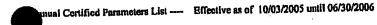
Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW07 -- Organic Parameters, Chromatography/MS

	Eligible to Report					Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	[SW-846 8270C, Rev. 3, 12/96]	- Nitroaniline (2-)
Certified	Yes	NJ	SHW07.05060	npw, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (3-)
Certified	Yes	NJ	SHW07.05062	npw, scm	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (4-)
Certified	Yes	NJ	SHW07.05063	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rov. 3, 12/96]	Chloronaphthalene (2-)
Certified	Yes	NJ	SHW07.05070	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorobenzene
Certified	Yes	NJ	SHW07.05080	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachiorobutadiene (1,3-)
Certified	Yes	NJ	SHW07,05090	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorocyclopentadione
Certified	Yes	NJ	SHW07.05100	npw, scm	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachloroethane
Certified	Yes	NJ	SHW07.05110	npw, scm	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorobenzene (1,2,4-)
Certified	Yes	NJ	SHW07.05120	npw, scm	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chioroethoxy) methane
Certified	Yes	NJ	SHW07.05130	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroethyl) ether
Centified	Yes	NJ	SHW07.05132	npw, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroisopropyl) ether
Certified	Yes	NJ	SHW07.05140	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlorophenyl-phenyl ether (4-)
Centified	Yes	NJ	SHW07.05150	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bromophenyl-phenyl ether (4-)
Certificd	Yes	NJ	SHW07.05160	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrotoluene (2,4-)
Certified	Yes	NJ	SHW07.05170	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rov. 3, 12/96]	Dinitrotoluene (2,6-)
Certified	Yes	NJ	SHW07.05180	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Isophorone
Certified	Yes	NJ	SHW07.05190	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrobenzene
Certified	Yes	NJ	SHW07.05200	NPW, SCM	GC/MS, Extract or Dir Inj. Capillary	[SW-846 8270C, Rev. 3, 12/96]	Butyl benzyl phthalate
Certified	Yes	NJ	SHW07.05210	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-ethylhexyl) phthalate
Certified	Yes	NJ	SHW07.05220	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary		Diethyl phthalate
Certified	Yes	NJ	SHW07.05230	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethyl phthalate
Certified	Yes	NJ	SHW07.05240	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Di-n-butyi phthalate
Certified	Yes	NJ	SHW07.05250	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Di-n-octyl phthalate
Certified	Yes	ŊJ	SHW07.05260	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Acenaphthene
Certified	Yes	NJ	SHW07.05270	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Anthracene
-	Yes	NJ	SHW07.05280	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Agenaphthylene
Certified Certified	Yes	NJ	SHW07.05290	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(a)anthracene
Certified	. Yes	NJ	SHW07.05300	NPW, SCM	GC/MS, Extract or Dir Inj. Capillary	[8W-846 8270C, Rov. 3, 12/96]	Benzo(a)pyrene
Certified	Yes	NJ	SHW07.05310	npw, scm	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(b)fluomnthene
Certified	Yes	NJ	SHW07.05320	npw, scm	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270C, Rev. 3, 12/96]	Benzo(ghi)perylene
Certified	Yes	NJ	SHW07.05330	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(k)fluoranthene
Certified	Yes	NJ	SHW07,05340	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	•	•
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## National Environmental Laboratory Accreditation Program

### ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW07 - Organic Parameters, Chromatography/MS

Sième	Eligible to Report NJ Data	State	Cada	S. Franklin	Tackatana Baradathan	Approved Method	Parameter Description
Status			Code	Matrix	Technique Description	[SW-846 8270C, Rev. 3, 12/96]	Chrysene
Certified	Yes	NJ	SHW07.05350	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	• • • • • • • • • • • • • • • • • • • •	Dibenzo(a,h)anthracene
Certified	Yes	NJ	SHW07.05360	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Fluoranthene
Certified	Yes	NJ	SHW07.05370	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	
Certified	Yes	NJ	SHW07.05380	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Fluorene
Certified	Yes	NJ	SHW07.05390	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Indeno(1,2,3-cd)pyrene
Certified	Yes	NJ	SHW07.05400	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylnaphthalene (2-)
Certified	Yes	ИJ	SHW07.05410	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Naphthalenc
Certified	Yes	עא	SHW07.05420	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenanthrene
Certified	Yes	NJ	SHW07.05430	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	. Pyrene
Certified	. Yes	NJ	SHW07.05440	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methyl phenol (4-chloro-3-)
Certified	Yes	NJ	SHW07,05450	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlorophenol (2-)
Certified	Yes	NJ	SHW07.05460	NPW, 8CM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorophenol (2,4-)
Certified	Yes	NJ	SHW07.05470	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethylphenol (2,4-)
Certified	Yes	NJ	SHW07.05480	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrophenol (2,4-)
Certified	Yes	NJ	SHW07.05490	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrophenol (2-methyl-4,6-)
Certified	Yes	NJ	SHW07.05500	NPW, SCM	GC/MS, Extract or Dir Inj. Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (2-)
Certified	Yes	NJ	SHW07.05510	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (4-)
Certified	Yes	NJ	SHW07.05520	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrophenol (2-)
Certified	Yes	NJ	SHW07.05530	NPW. SCM	GC/MS, Extract or Dir Inj. Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrophenol (4-)
Certified	Yes	NJ	SHW07.05540	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pentachlorophenol
Certified	Yes	NJ	SHW07.05550	NPW, SCM	GC/MS, Extract or Dir Inj. Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenol
Certified	Yes	NJ	SHW07.05560	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorophenol (2,4,5-)
Certified	Yes	NJ	SHW07.05570	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichiorophenol (2,4,6-)
Certified	Yes	NJ	SHW07.05590	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (3-)
Certified	Yes .	NJ	SHW07.05600	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dibenzofuran
Certified	Yes	NJ	SHW07.05691	NPW, SCM	GC/MS, Extract or Dir Ini, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	NJ	SHW07.05692	NPW. SCM	GC/MS, Extract or Dir Inj. Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	NJ	SHW07.05700	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rov. 3, 12/96]	Dichlorobenzene (1,4-)
Certified	Yes	NJ	SHW07.05750	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pyridine
Applied	No	NJ	SHW07,05770	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Aldrin
Applied	No	NJ	SHW07.05780	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Alpha BHC
Applied	No	N	SHW07.05790	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Beta BHC

#### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

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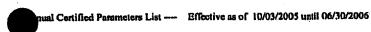
Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category: SHW07 -- Organic Parameters, Chromatography/MS

	Eligible to					•	
Status	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
	No	NJ	SHW07.05800	NPW. SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rov. 3, 12/96]	Dolta BHC
Applied	No	NJ	SHW07.05810	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rov. 3, 12/96]	Lindane (gamma BHC)
Applied	No	NJ	SHW07.05820	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rov. 3, 12/96]	Chlordane (technical)
Applied	No	NJ	SHW07.05830	NPW. SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlordane (alpha)
Applied	No No	NJ	SHW07.05840	npw, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chiordane (gamma)
Applied		NJ	SHW07.05850	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[8W-846 8270C, Rev. 3, 12/96]	DDD (4,4'-)
Applied	No No	NJ	SHW07.05860	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	DDE (4,4'-)
Applied		NJ	SHW07.05870	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	DDT (4,4'-)
Applied	No	N	SHW07.05880	NPW. SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dieldrin
Applied	No	נא נא	SHW07.05890	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Endosulfan I
Applied	No No	NJ	SHW07.05900	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Endosulfan li
Applied	No	NJ	SHW07.05910	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Endosulfan sulfate
Applied	No	NJ	SHW07.05920	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	<b>Endrin</b>
Applied	No	NJ	SHW07.05930	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Endrin aldehyde
Applied	No	נא	SHW07.05940	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Endrin ketone
Applied	No	NJ	SHW07.05950	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Heptachlor
Applied	No No	נא	SHW07.05960	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Heptachior epoxide
Applied		נא נא	SHW07.05970	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methoxychlor
Applied	No No	NJ	SHW07.05980	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Тохарнене
Applied	No	NJ	SHW07.07510	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	PCB 1016
Applied		NJ	SHW07.07520	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	PCB 1221
Applied	No No	NJ	SHW07.07530	NPW, SCM	GC/MS, Extract or Dir Inj. Capillary	[SW-846 8270C, Rev. 3, 12/96]	PCB 1232
Applied	No	NJ	SHW07.07540	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	PCB 1242
Applied	No	NJ	SHW07.07550	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	PCB 1248
Applied Applied	No No	NJ	SHW07.07560	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	PCB 1254
Applied	No	NJ	SHW07.07570	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	PCB 1260







# National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



#### Category: SHW09 - Miscellaneous Parameters

•						A	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description		Cyanide
Status Certified	Yes	State NI N	Code  SHW09.02000 SHW09.03000 SHW09.04100 SHW09.05000 SHW09.09000 SHW09.10000 SHW09.11000 SHW09.12000 SHW09.13050 SHW09.13050 SHW09.14000 SHW09.15000 SHW09.15000 SHW09.15000 SHW09.15000 SHW09.15000 SHW09.19000 SHW09.24150 SHW09.29150 SHW09.30250 SHW09.30250 SHW09.302500 SHW09.33100	Matrix  NPW, SCM   Distillation Distillation Titrimetric/Manual Spectrophotometric Colorimetric, Automated Redox Titration Water Extraction, Distillation Titration Colorimetric, Automated (Chloranilate) Colorimetric, Automated (Thymol Blue) Turbidimetric Ion Chromatography Electrometric Wide Range pH Paper Ion Chromatography, Bomb Combustion, Solids Infrared Spectrometry or FID Colorimetric, Man, 4AAP Distillation Extraction & Gravimetric - LL or SPE Ion Chromatography Ion Chromatography Ion Chromatography Ion Chromatography Colorimetric, Automated (Ferri-CN AAII) Ion Chromatography	Approved Mathod  [SW-846 9010B, Rov. 2, 12/96]  [SW-846 9010B, Rov. 0, 12/96]  [SW-846 9014, Rov. 0, 12/96]  [SW-846 9012A, Rov. 1, 12/96]  [SW-846 9030B, Rov. 2, 12/96]  [SW-846 9031, Rov. 0, 7/92]  [SW-846 9034, Rov. 0, 12/96]  [SW-846 9035, Rov. 0, 9/86]  [SW-846 9036, Rov. 0, 9/86]  [SW-846 9036, Rov. 0, 9/94]  [SW-846 9040B, Rov. 2, 1/95]  [SW-846 9056, Rov. 0, 9/94]  [SW-846 9056, Rov. 0, 9/94]  [SW-846 9056, Rov. 0, 9/86]  [SW-846 9056, Rov. 0, 1, 2/99]  [SW-846 9056, Rov. 0, 12/94]   Cyanide Cyanide - amenable to Ci2 Cyanide Cyanide Suifides, acid sol. & insol. Suifides - extractable Suifides, acid sol. & insol. Suifide Suifide Suifide Suifide Suifide Suifide Suifide Suifide The - waste, >20% water The inorganic anions Total organic carbon (TOC) Phenols Oil & grease - hem Oil & grease - total hem-npm Nitrite Nitrate Bromide Chloride		
Certified Certified	Yes Yes	NJ NJ	SHW09.30250 SHW09.32000	npw, scm npw, scm	Ion Chromatography Colorimetric, Automated (Ferri-CN AAII)	[SW-846 9056, Rev. 0, 12/96] [SW-846 9251, Rev. 0, 9/86]	Chlorids
Counted	1.00	• 40		•			

## National Environmental Laboratory Accreditation Program ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

#### Effective as of 10/93/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092

Category: SHW04 - Inorganic Parameters Eligible to Report

State

NJ

NJ

NJ

NJ

NJ

Code

SHW04.02200

SHW04.02500

SHW04.03000

SHW04.03700

SHW04.03800

SHW04.33500

NJ Data

No

No

Yes

Yes

No

Yes

Status

Applied

**Applied** 

Certified

Certified

Applied

Certified



Category:	SHW12 II		say			•	
_	Eligible to Report NJ Data		Code	Matrix	Technique Description	Approved Method	Parameter Description
Status		State NJ	SHW12.10000	NPW. SCM	Screening	[SW-846 4010, Rev. 1, 12/96]	Immunoassay - pentnohlorophenol
Applied	No	ru.	31111 12.15555		The way are		
	er mar 1.4		ia, Muiti-Cone. In	organics			
Category:			18 titutt-cone m	or Brissian			A STATE OF THE STA
	Eligible to Report	,				Approved Method	Parameter Description
Status	NJ Data	State	Code	Matrix	Technique Description	[EPA ILM05.3]	Mercury - soils/sediments
Applied	No	נא	CLP01.44101	SCM	CVAA, Manual	[BPA ILMOSS]	
Category	. shwa2 (	Tharacte:	ristics of Hazardou	s Waste		e distribution de la companya de la La companya de la co	2
Carebon 1	Bligible to					i ka m	
	Report NJ Data		Code	Matrix	Technique Description	Approved Method	Parameter Description
Status		State	SHW02.02100	SCM	Bum Rate	[SW-846 1030, Rev. 0, 12/96]	Ignitability of solids
Certified	Yes	נא נא	SHW02.05000	SCM	HCN Release, Distill, Colorimetric	[SW-846 7.3.3.2, Rev. 3, 12/96]	Reactivity
Certified	Yes	NJ	SHW02.06000	SCM	H2S Release, Distill, Redox	[SW-846 7.3.4.2, Rev. 3, 12/96]	Reactivity
Certified	Yes	NJ NJ	SHW02.10000	SCM	Extraction	[SW-846 1330A, Rev. 1, 7/92]	Metals - oily wasto
Applied	No	[43	3111102.10000				

Approved Method

[SW-846 3031, Rev. 0, 12/96]

[SW-846 3040A, Rev. 1, 12/96]

[SW-846 3050B, Rev. 2, 12/96]

[SW-846 3060A, Rev. 1, 12/96]

[SW-846 6200, Rov. 0, 1/98]

[SW-846 7471 A, Rev. 1, 9/94]

KEY: AE - Air and Emissions, BT - Biological Tissues, DW - Drinking Water, NPW - Non-Potable Water, SCM - Solid and Chemical Materials

Matrix

SCM

SCM

SCM

SCM

SCM

SCM

Technique Description

Chromium VI Digestion

AA, Munual Cold Vapor

Field X-Ray Fluorescence

Acid Digestion For AA or ICP, Oil

Dissolution of Oil, Grease & Wax

Acid Digestion, Soil Sediment & Sludge



Parameter Description

Mercury - solid waste

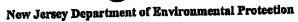
Metals

Metals

Metals

Metals

Triad Metals



## National Environmental Laboratory Accreditation Program

# ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002

284 SHEFFIELD ST Mountainside, NJ 07092



Category	SHW05 -	Organic	Parameters,	Prep./	Screening
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Certified	Yes	NJ	SHW06.01000	SCM	Field GC	[SW-846 3815, Rev. 0, 11/00]	1 titti Oi Bannos
Status	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description Triad Organics
Category	SHW06 C		Parameters, Chron	atography			tettamma (No. por operation)
				arms.	Marketin .	and the state of t	
Applied	No	NJ ·	SHW05.18000	SCM	Hendspace, GE or GC/MS Screen	[SW-846 3810, Rev. 0, 9/86]	,
Certified	Yes	NJ	SHW05.17000	SCM	Cleanup-Sulfuric Acid/KMnO4	[SW-846 3665A, Rov. 1, 12/96]	Volatile organics
Certified	Yes	NJ	SHW05.16000	SCM	Cleanup-Sulfur Removal	[SW-846 3660B, Rev. 2, 12/96]	Semivolatile organics
Applied	· No	NJ	SHW05.15000	SCM	Cleanup-Acid/Base Partition	[5W-846 3650B, Rev. 2, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.14000	SCM	Cleanup-Gel Permeation	[SW-846 3640A, Rov. 1, 9/94]	Semivolatile organics
Certified	Yes	NJ	SHW05.13000	SCM	Cleanup-Silica Gel	[SW-846 3630C, Rev. 3, 12/96]	Semivolatile organics
Applied Certified	No Yes	NJ	SHW05,12000	SCM	Cleanup-Florisil	[SW-846 3620B, Rev. 2, 12/96]	Semivolatile organics
Certified	No.	N	SHW05.11000	SCM	Petroleum Wasie, Cleanup Alumina	[SW-846 3611B, Rev. 2, 12/96]	Semivolatile organics
Contilled	Yes Yes	NU	SHW05.10000	SCM	Cleanup-Alumina	[SW-846 3610B, Rev. 3, 12/96]	Semivolatile organics Semivolatile organics
Certified	Yes Yes	NI	SHW05.07310	SCM	Methanol Extract, Closed System P & T	[SW-846 5035, Rev. 0 12/96]	Volatile organics - high conc.
Applied	No	NJ NJ	SHW05.07300	SCM	Closed System Purge & Trap	[SW-846 5035, Rov. 0, 12/96]	Volatile organics - low conc.
Certified	Yes	NJ	SHW05.06100	SCM	Waste Dilution, Volatile organics	[SW-846 3585, Rev. 0, 12/96]	Organics
Applied	No		SHW05.06000	SCM	Waste Dilution	[SW-846 3580A, Rev. 1, 7/92]	Organics
Applied	No -	NJ NJ	SHW05.05200	SCM	Supercritical Fluid Ex. PAH	[SW-846 3561, Rev. 0, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.05100	SCM	Supercritical Fluid Ex. TPH	[8W-846 3560, Rev. 0, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.05000	SCM	Ultrasonic Extraction	[SW-846 3550B, Rev. 2, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.04000 SHW05.04200	SCM	Pressurized Fluid Extraction	[SW-846 3545, Rev. 0, 12/96]	Semivolatile organics
Applied	No	NJ	SHW05,03000	SCM	Automatic Soxhlet Extraction	[8W-846 3541, Rev. 0, 9/94]	Semivolatile organics
Status		State		SCM	Soxhlet Extraction	[SW-846 3540C, Rev. 3, 12/96]	Semivolatile organics
<b></b> .	Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
	Rligible to	1			•	•	and the second sections

Category: SHW07 -- Organic Parameters, Chromatography/M8

	Eligible to Report NJ Data		Code	Matrix	Technique Description		
Status Applied	No	NJ	SHW07.03000	SCM	Field OC/M8	* .	

Approved Method Parameter Description
[SW-846 8265, Rev. 0, 3/02] Tried Organics

**建国行动 可用的 医混合器起始的** 

2004/003

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

---- Annual Certified Parameters List ---- Effective as of 10/03/2005 until 06/30/2006

Page 53 of 54

### National Environmental Laboratory Accreditation Program

## ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 10/03/2005 until 06/30/2006

Laboratory Name: CHEMTECH Laboratory Number: 20012 Activity ID: NLC050002 284 SHEFFIELD ST

Mountainside, NJ 07092



Category:	SHW09	- Miscellancous	Parameters
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	Report		<b>6</b> . 4.	Madele	Tachniana Darerintian	Approved Method	Parameter Description
Status Certified Certified Certified Certified Certified Applied Applied Applied	Report NJ Data Yes Yes Yes Yes Yes No No	State NJ	Code SHW09.01000 SHW09.04000 SHW09.08100 SHW09.16000 SHW09.25000 SHW09.28000 SHW09.28100 SHW09.28200	Matrix SCM	Technique Description  Extraction SPE, Infrared Spectrometry Extraction, Oils and Solids Extraction Mix with Water or Calcium Chloride Extraction & Gravimetric Colorimetric, Field Test Kits Soil Screen Test Transformer Oil Screen	Approved Method [SW-846 8440, Rev. 0, 12/96] [SW-846 9013, Rev. 0, 7/92] [SW-846 9023, Rev. 0, 12/96] [SW-846 9045C, Rev. 3, 1/95] [SW-846 9071 B, Rev. 2, 5/99] [SW-846 9077, Rev. 0, 9/94] [SW-846 9078, Rev. 0, 12/96] [SW-846 9079, Rev. 0, 12/96]	Total rec. petroleum hydrocarbons Cyanide Extractable organic halides (EOX) pH - soil and wasts Oil & grease - sludge-hem Chlorine - total, petroleum Polychlorinated biphenyls (PCB's) Polychlorinated biphenyls (PCB's)
Applied Certified Certified Certified Applied	Yes Yes Yes	נא נא נא	SHW09.29000 SHW09.39000 SHW09.40000 SHW09.53000	SCM SCM SCM SCM	Flow-Through Paint Filter, Observation Soils, Ammonium Acetate Soils, Sodium Acetate Soil, Colonnetric Screan	[8W-846 9095, Rev. 0, 9/86] [SW-846 9080, Rov. 0, 9/86] [SW-846 9081, Rev. 0, 9/86] [SW-846 8515, Rev. 0, 12/96]	Free liquid Cation-exchange capacity Cation-exchange capacity Trinitrotoluene (2,4,6-)

#### Category: SHW12 - Immunoassay

	Cultibrate to						
_	Report NJ Data		Code	Matrix	Technique Description	Approved Method	Parameter Description
Status	No Data	State				[SW-846 4020, Rev. 0, 12/96]	Immunoassay - polychlorinated biphenyls
Applied	No	N	SHW12.12000	SCM	Screening	[SW-846 4000, Rev. 0, 12/96]	Triad Immunoassay
Certified	Yes	N	SHW12.13000	SCM	Field Immunoassay	[5 44-840 4000, 864. 6, 1230]	***************************************

Joseph F. Aiello, Chief

